

OCT 8 1941

1.947  
F2452

Conference on Research in National Income and Wealth  
May 1941



USES OF NATIONAL INCOME ESTIMATES IN AGRICULTURAL RESEARCH AND POLICY

Louis H. Bean





Conference on Research in National Income and Wealth  
May 1941

USES OF NATIONAL INCOME ESTIMATES IN AGRICULTURAL RESEARCH AND POLICY

Louis H. Bean, Counselor  
Bureau of Agricultural Economics

Introduction

There are now three broad uses of national income estimates in the field of agriculture. One is in connection with quantitative research in the relation of demand to agricultural prices and farm income. The second is in connection with legislative standards for the programs conducted under the Agricultural Adjustment Act. The third is in connection with evolving agricultural policies that stem from an interest in a better distribution of the national income. These three uses are, of course, highly interrelated.

In so far as the results of price and income research determine production and price policies, it may be said that the use of national income estimates in research as measures of demand contribute directly to the shaping of agricultural policies. Their use in policy making has in turn stimulated additional research.

In the case of standards for agricultural adjustment programs and activities of other action agencies, estimates of national income make a more direct contribution to policy determination, for they are involved in the parity income standard. The concept of parity income has been written into the Agricultural Adjustment Act as a standard justifying an annual appropriation of 500 million dollars to be paid to farmers in order to more nearly equalize the per capita rate of economic progress of farmers and the rest of the population from a common base period.

OCT 9 1941 N.W.







More recently, the distribution of the national income as between the high and low income brackets has become an important consideration in connection with the need for expanded domestic outlets for surplus farm products, and the defense need for building up the health of the nation through better nutrition. The maldistribution of the national income and its bearing on the purchases of food and clothing materials by consumers in the different income brackets has been an important factor in the two-price schemes that have been adopted in the domestic distribution of surplus farm products to low income groups. These programs now embrace food distribution to people on relief, to low income families under the Food Stamp Plan, and to school children in the form of free lunches. Cotton is also being distributed in the form of mattresses to families having incomes of less than three hundred dollars in cash.

In the following pages we present a brief review of these expanded uses of estimates of national income in agriculture. Here we are not concerned with problems of definition, of the accuracy of estimates, or of economic implications, but rather with a statement of the growth of interest in these estimates, with some of the uses to which they have been put in the past, and with the present trend of interest in and uses of both estimates of aggregate national income and estimates of distribution among the different social and economic groups.

#### Major Uses of National Income Data

##### 1. Uses of estimates of national income in agricultural price research

The present use of national income estimates in agricultural price research has an historical background which parallels the progress made by the various agencies that have contributed to the development of



More recently, the distribution of the national income as between the high and low income brackets has become an important consideration in connection with the need for expanded domestic outlets for surplus farm products, and the defense need for building up the health of the nation through better nutrition. The maldistribution of the national income and its bearing on the purchases of food and clothing materials by consumers in the different income brackets has been an important factor in the two-price schemes that have been adopted in the domestic distribution of surplus farm products to low income groups. These programs now embrace food distribution to people on relief, to low income families under the Food Stamp Plan, and to school children in the form of free lunches. Cotton is also being distributed in the form of mattresses to families having incomes of less than three hundred dollars a year.

In the following pages we present a brief review of these expanded uses of estimates of national income in agriculture. Here we are not concerned with problems of definition, or the accuracy of estimates, or of economic implications, but rather with a statement of the growth of interest in these estimates, with some of the uses to which they have been put in the past, and with the present trend of interest in and uses of both estimates of aggregate national income and estimates of distribution among the different social and economic groups.

### Major Uses of National Income Data

#### 1. Uses of estimates of national income in agricultural price research

The present use of national income estimates in agricultural price research has an historical background which parallels the progress made by the various agencies that have contributed to the development of



national income data. In the early 1920's when the Department of Agriculture began its research in price behavior in terms of fluctuating supply and demand conditions, it utilized very largely the current indexes of industrial production and of factory payrolls as measures of changes in demand in the domestic markets. As additional data on the money income of other groups of consumers became available, they were added to the factory payroll data to obtain as large a coverage of national consumer income as possible.

Broader measures of consumer income as represented by King's estimates of the national income were not usable during the 1920's, for estimates were then not currently available as they are now. Nevertheless, the need for broader measures of consumer purchasing power was fully evident. Such estimates of national income as were then available did, however, have a bearing on agricultural policy, for they made it possible for agricultural leaders to point to the smaller share of the national income received by farmers in the 1920's as compared with their share in earlier years, and to the smaller per capita dollar income of farm people as compared with that of other groups.

During the 1920's also, the research in farm income and the annual estimates of gross and net farm income went beyond the mere presentation of agricultural data. An effort was made to supply a basis for comparison, which helped in establishing the then current belief that agriculture was not keeping pace in economic progress with the rest of the nation. These annual estimates of net farm income were usually contrasted with the earnings of other groups such as wage-earners and with the rate of earnings on corporate capital. Both the facts as to the declining share of the national income and the evidence on the failure of farmers



national income data. In the early 1930's when the Department of Agriculture began its research in price behavior in terms of forecasting supply and demand conditions, it utilized very largely the current indexes of industrial production and of factory payrolls as measures of changes in demand in the domestic markets. As additional data on the money income of other groups of consumers became available, they were added to the factory payroll data to obtain as large a coverage of national consumer income as possible.

Broader measures of consumer income as represented by King's estimates of the national income were not available during the 1930's, for estimates were then not currently available as they are now. Nevertheless, the need for broader measures of consumer purchasing power was fully evident. Such estimates of national income as were then available did, however, have a bearing on agricultural policy, for they made it possible for agricultural leaders to point to the smaller share of the national income received by farmers in the 1930's as compared with their share in earlier years, and to the smaller per capita dollar income of farm people as compared with that of other groups.

During the 1930's also, the research in farm income and the annual estimates of gross and net farm income went beyond the mere presentation of agricultural data. An effort was made to supply a basis for comparison, which helped in establishing the then current belief that agriculture was not keeping pace in economic progress with the rest of the nation. These annual estimates of net farm income were usually contrasted with the earnings of other groups such as wage-earners and with the rate of earnings on corporate capital. Both the facts as to the declining share of the national income and the evidence on the failure of farmers



either as laborers or as entrepreneurs to keep pace with the rising prosperity of the 1920's must be considered as background for some of the policies adopted under the New Deal agricultural programs, particularly those programs that emphasized the need for securing for farmers parity prices and parity income.

The growing importance of the use of estimates of national income in agricultural price analyses and the place that they attained by 1932 may be illustrated by the fact that in 1932 we undertook to project the estimates of the National Bureau of Economic Research beyond the latest estimate then available, which was for the year 1928. In an article entitled "Money Income of Farmers and Industrial Workers and Selected Retail Expenditures" which appeared in The Agricultural Situation for February 1933, we summarized the progress that we had made in the use of the various available measures of consumer purchasing power. We there demonstrated the need for more comprehensive measures by contrasting the course of factory payrolls with the course of railroad payrolls and payrolls in construction activity. See figure 1. The combination of these three measures of domestic demand was also correlated with a monthly series on the value of farm marketings, and for the years 1921-1932 this combination was shown to correlate much more closely with farm income than with any one of the three.

The need for an even more inclusive measure of consumer income was further illustrated by a remarkably close correspondence between retail expenditures for pork, beef, lamb, mutton, and butter, and the national income for the years 1920-1932. In this case we utilized one of our earlier findings, namely, the gross income of corporations, as a statistical basis for projecting the then available annual estimates of the national



either as laborer or as entrepreneur to keep pace with the rising price-  
level of the 1930's must be considered as background for some of the poli-  
cies adopted under the New Deal agricultural program, particularly those  
programs that emphasized the need for securing for farmers parity prices  
and parity income.

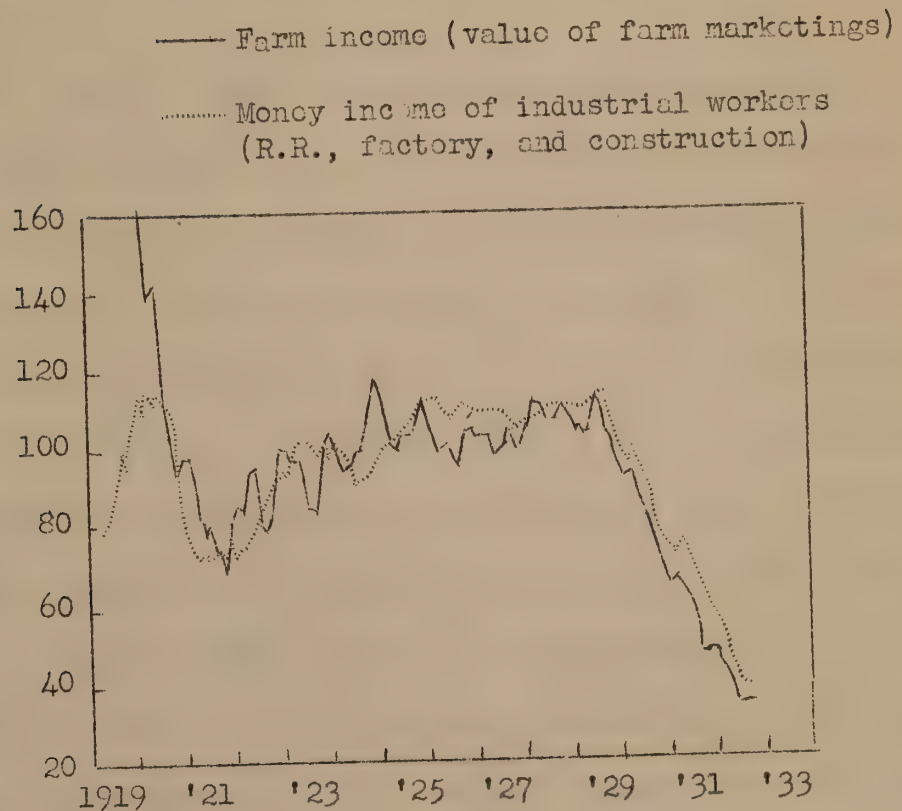
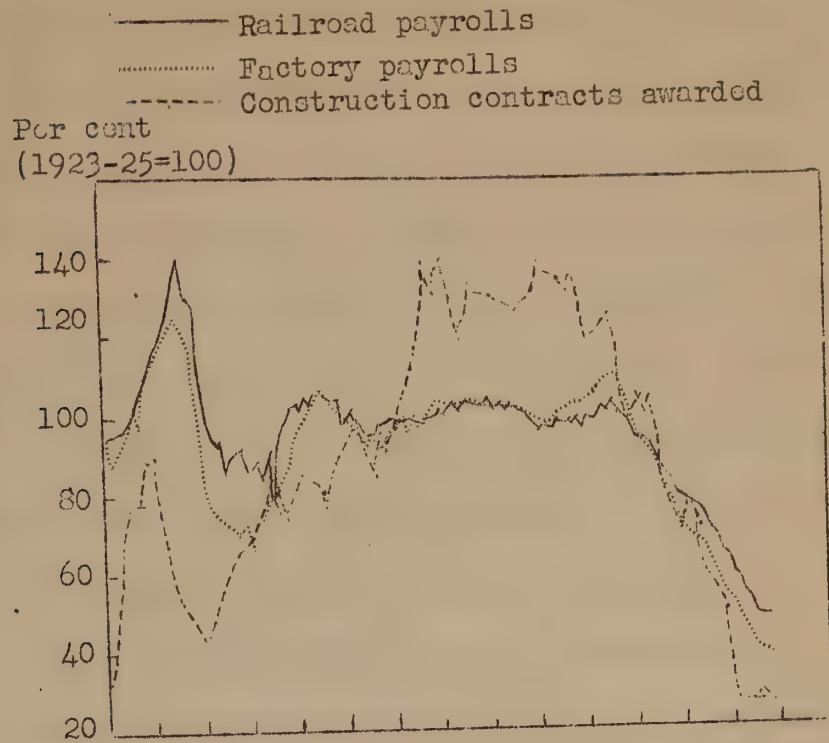
The growing importance of the use of estimates of national in-  
come in agricultural price analysis and the place that they should play  
in 1932 may be illustrated by the fact that in 1932 we undertook to project  
the estimates of the National Bureau of Economic Research beyond the 1931-  
estimates then available, which was for the year 1930. In an article  
entitled "Money Income of Farmers and Industrial Workers and Selected Re-  
tail Expenditures" which appeared in The Agricultural Situation for 1932,  
May 1932, we summarized the progress that we had made in the use of the  
various available measures of consumer purchasing power. We there dis-  
cussed the need for more comprehensive measures by contrasting the course  
of factory payrolls with the course of retail payrolls and payrolls in  
construction activity. See Figure 1. The correlation of these three mea-  
sures of domestic demand was also correlated with a monthly series on the  
value of farm marketing, and for the years 1921-1932 this correlation was  
shown to correlate much more closely with farm income than with any of  
the three.

The need for an even more inclusive measure of consumer income  
was further illustrated by a remarkably close correspondence between retail  
expenditures for food, fuel, farm, and other, and the national  
income for the years 1920-1932. In this case we utilized one of our ear-  
lier findings, namely, the close income of corporations, as a statistical  
basis for projecting the then available annual estimates of the national



Figure 1

To illustrate the inadequacy of using only factory payrolls as a general measure of consumer income and general domestic demand





THE  
FEDERAL  
BUREAU OF INVESTIGATION

WASHINGTON, D. C. 20535

REPORT OF THE

INVESTIGATOR

DATE OF REPORT



income. The gross income of corporations was taken to represent a wide variety of disbursements, actual and potential, for wages, materials, and dividends, which could be considered in the nature of actual or potential income of wage earners, managers, owners, and bond- and share-holders. The incomes of certain groups of consumers, such as government employees and professional groups were not, of course, represented here. The course of this gross income series from 1920 to 1931 corresponded very closely to the estimates of national income of the National Bureau of Economic Research. It was recognized that in some years the gross income of corporations fluctuated somewhat more than the estimates of the national income, because the latter included evaluations of certain forms of income that were relatively stable. On the basis of this correspondence it was possible to project the estimates of the National Bureau of Economic Research from 1928 (the year for which the latest estimate was available) to 1932. See figures 2 and 3.

The fact that the annual national money purchasing power, as measured by the annual indexes of national income or nonagricultural income, has been demonstrated as essential in analyzing livestock prices, retail expenditures, and incomes of producers of livestock led next to the development of a more comprehensive monthly index of nonagricultural income. In the fall of 1933, an index of incomes of urban consumers was prepared on the basis of current payroll data covering workers in factories, railroads, mining, construction, trade, certain services, public utilities, and government. To these monthly data were added estimates of interest and dividend payments, and the composite was taken to represent an approximation to the monthly variations in the income of nonagricultural consumers. See figure 4.





Figure 2

To illustrate the correspondence between gross income of corporations and the national income (excluding farm income)

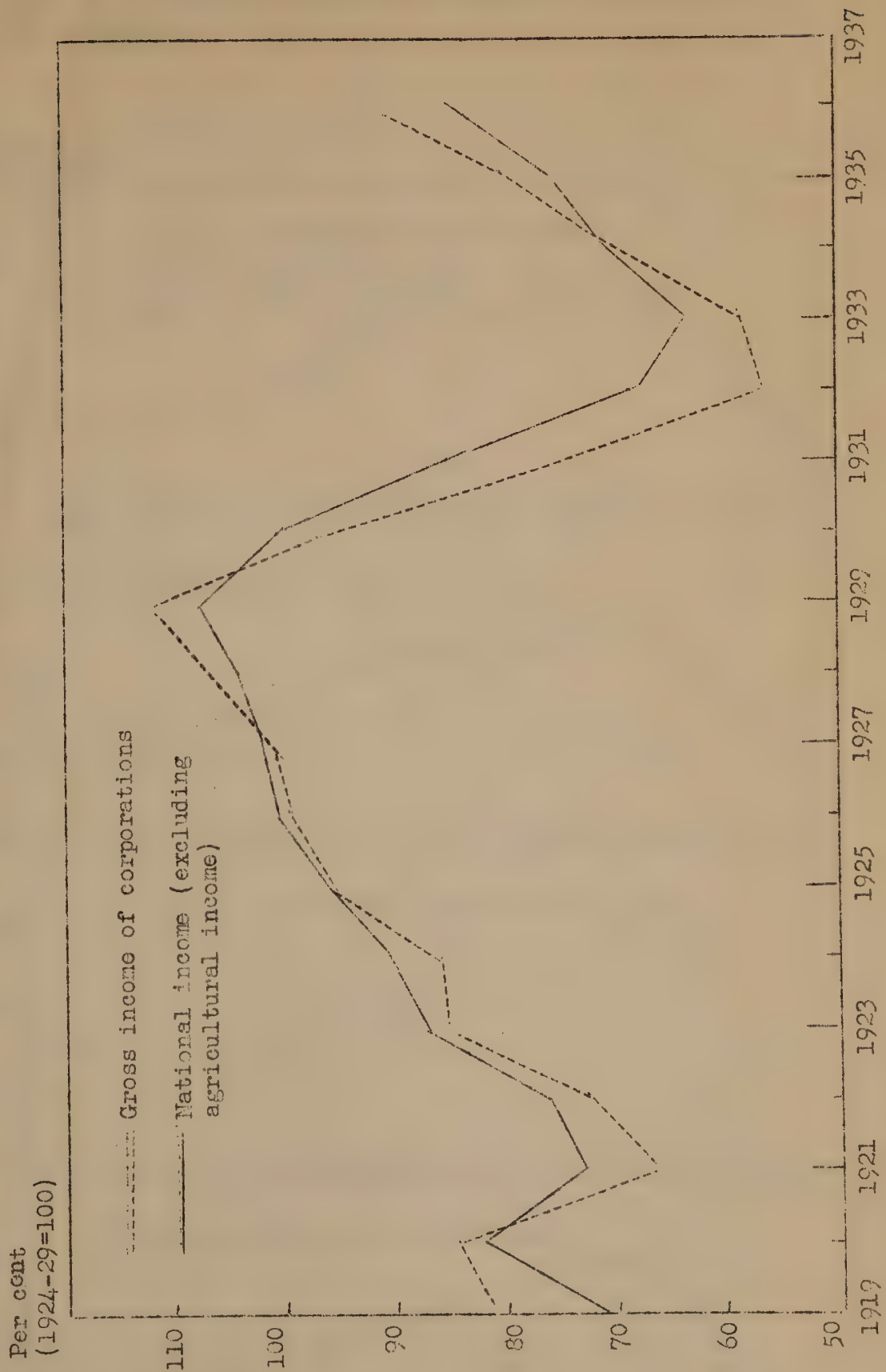


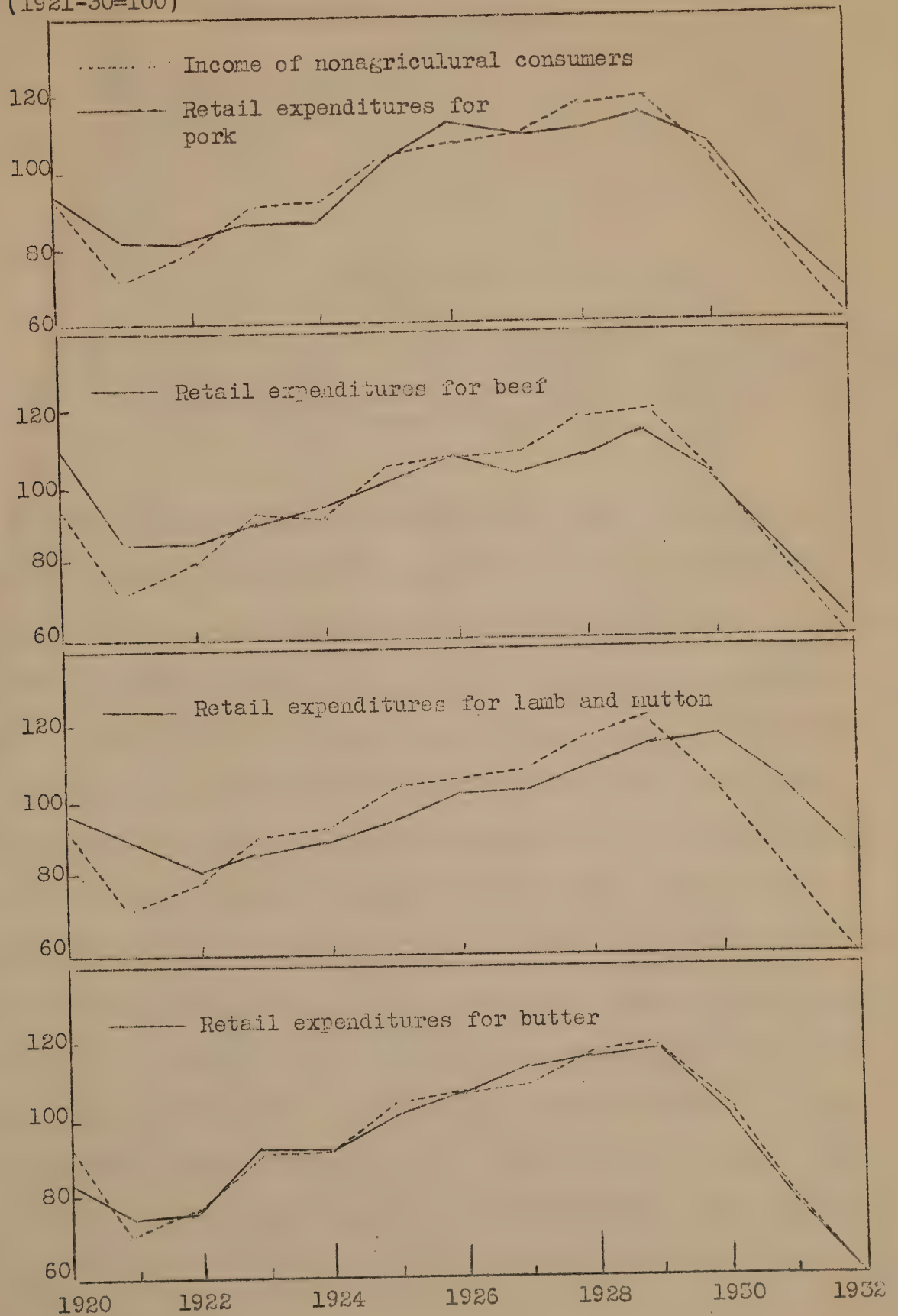




Figure 3

To illustrate the first use of national income to represent income of consumers in relation to retail expenditures for food products

Per cent  
(1921-30=100)





1911

1. The first part of the paper is devoted to a general discussion of the problem of the origin of life. It is shown that the problem is one of the most important and most difficult in the history of science.

2. The second part of the paper is devoted to a discussion of the various theories of the origin of life. It is shown that the most plausible theory is that of spontaneous generation.

3. The third part of the paper is devoted to a discussion of the various experiments which have been conducted in order to test the theory of spontaneous generation. It is shown that the results of these experiments are in favor of the theory.

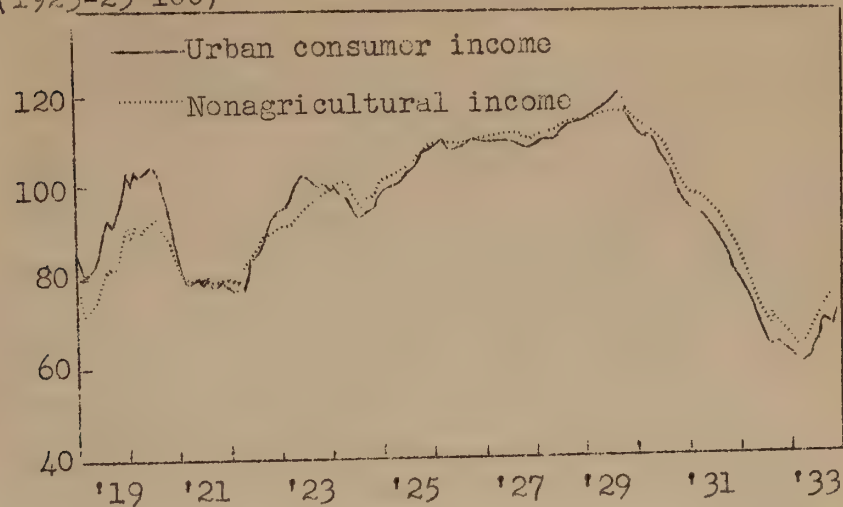
4. The fourth part of the paper is devoted to a discussion of the various objections which have been raised against the theory of spontaneous generation. It is shown that these objections are not valid.

Figure 4

To illustrate the utility of a first approximation to monthly variations in urban consumer income as indicated by its similarity to a subsequent measure of nonagricultural income based on more comprehensive data

Per cent

(1923-25=100)



Except for two periods there is very little difference between the Wells-Bean index of incomes of urban consumers and the index of nonagricultural income derived from estimates of national income and the Wells-Bean monthly index.

The additional income information that became available during the early 1930's made it possible to improve upon this monthly index and, in fact, to construct a monthly estimate of the national income. See figure 5. This improved monthly series yielding both monthly estimates of national and nonagricultural income was described in a bulletin of the Agricultural Adjustment Administration entitled "Nonagricultural Income as a Measure of Domestic Demand". One of the purposes of this publication was to stimulate the Department of Commerce to adopt the technique we had used, so that we could have one governmental agency supply both annual and monthly national income estimates. The reader will find in this bulletin, in addition to the description of the methods used in constructing the monthly national income index, several major items of importance in the uses of national income. These include: (1) correlation between the annual estimates of the national income or nonagricultural income with the gross income of corporations; (figure 2) (2) differences between the annual



1. The first part of the report  
concerns the general situation  
of the country.

2. The second part of the report  
concerns the economic situation  
of the country.

3. The third part of the report  
concerns the social situation  
of the country.

4. The fourth part of the report  
concerns the political situation  
of the country.

5. The fifth part of the report  
concerns the cultural situation  
of the country.

6. The sixth part of the report  
concerns the international situation  
of the country.

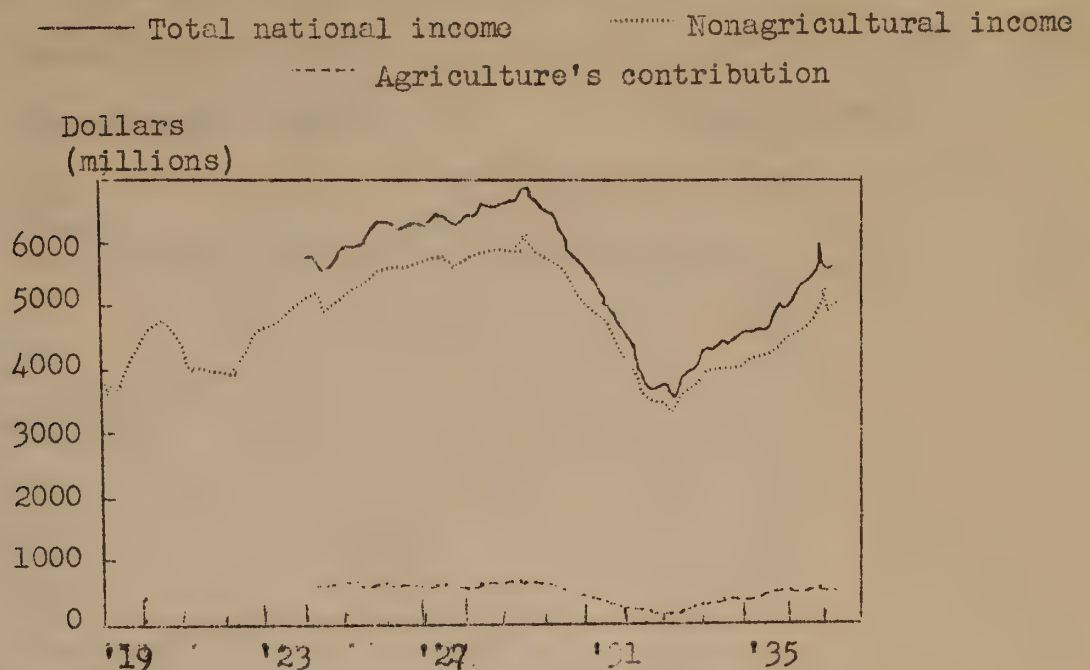
7. The seventh part of the report  
concerns the future of the country.

8. The eighth part of the report  
concerns the conclusion of the report.

9. The ninth part of the report  
concerns the appendix of the report.

Figure 5

To illustrate the first monthly indexes of total national income and nonagricultural income



Nonagricultural income accounts for around 90 per cent of total national income and the fluctuations in the total national income are, therefore, similar to those in non-agricultural income.

variations in the total national income and some of its components. (see figure 6); (3) annual estimates of retail expenditures for meats and poultry products, and the estimates of nonfarm labor income which constitutes the largest proportion of the national income (figure 7); (4) a comparison of the monthly estimates of retail expenditures for meats and poultry products and the monthly index of nonagricultural income from 1921 to 1937 (figure 8); (5) a comparison between the monthly department store sales and the index of nonagricultural income, 1919-1937 (figure 9); and (6) the correspondence between the estimates of total food sales and nonagricultural income for the years 1929 to 1936 (figure 10).

It may be observed at this point that these illustrations, particularly those bearing on the dependence of retail expenditures for food and nonfood items on the national money income of consumers, are elaborations of the underlying facts which our price research of the 1920's had



THE [illegible] [illegible]

[illegible] [illegible] [illegible]  
[illegible] [illegible] [illegible]  
[illegible] [illegible] [illegible]

off [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

off of [illegible]

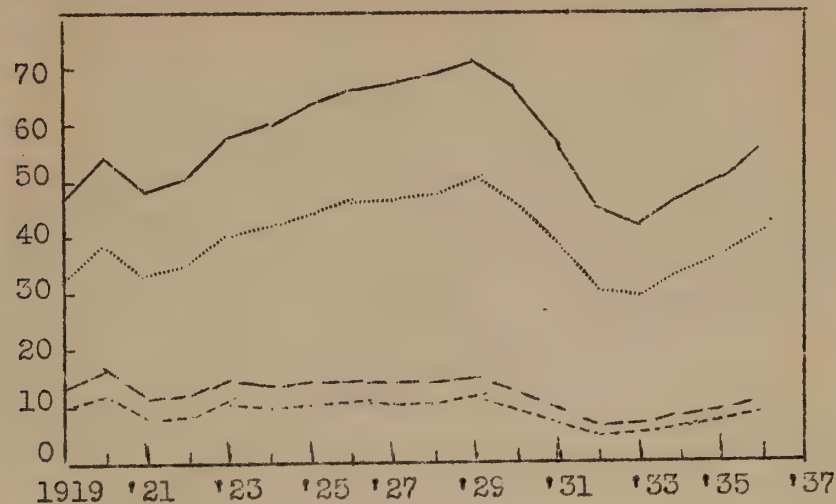
with [illegible]

Figure 6

To illustrate the differences in the several components of national income as measures of domestic demand

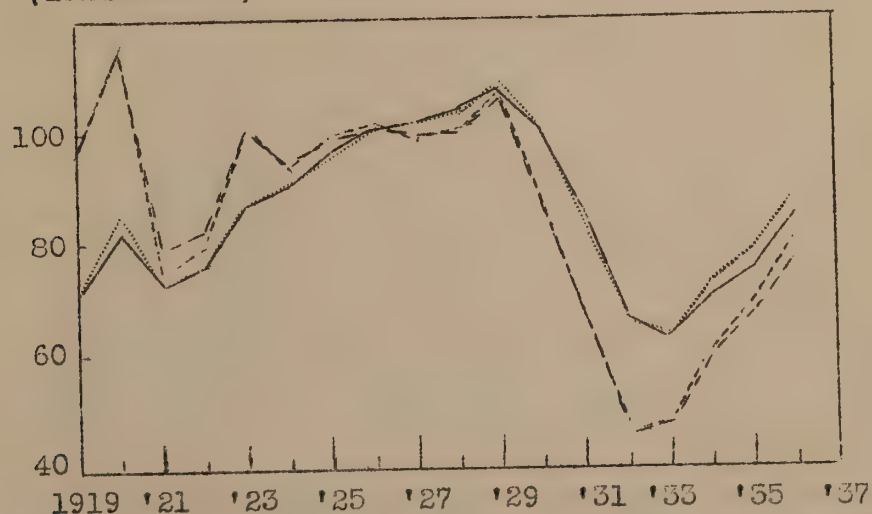
— Nonagricultural income      - - - Industrial worker income  
 ..... Nonfarm labor income      - - - Factory wages

Dollars  
 (billions)



Employment and pay rolls in factories, mines, and railroads did not increase materially between 1923 and 1929. Consequently they do not reflect the rise in domestic demand or purchasing power as do the total labor income or total non-agricultural income.

Per cent  
 (1924-29=100)



The two comprehensive measures of demand, total labor and nonagricultural income, show similar trends and fluctuations. The less comprehensive measures show greater fluctuations but no upward trend.



... ..  
... ..  
... ..  
... ..  
... ..

Figure 7

To illustrate the relation of the labor income portion of the national income to retail expenditures for meats and dairy products

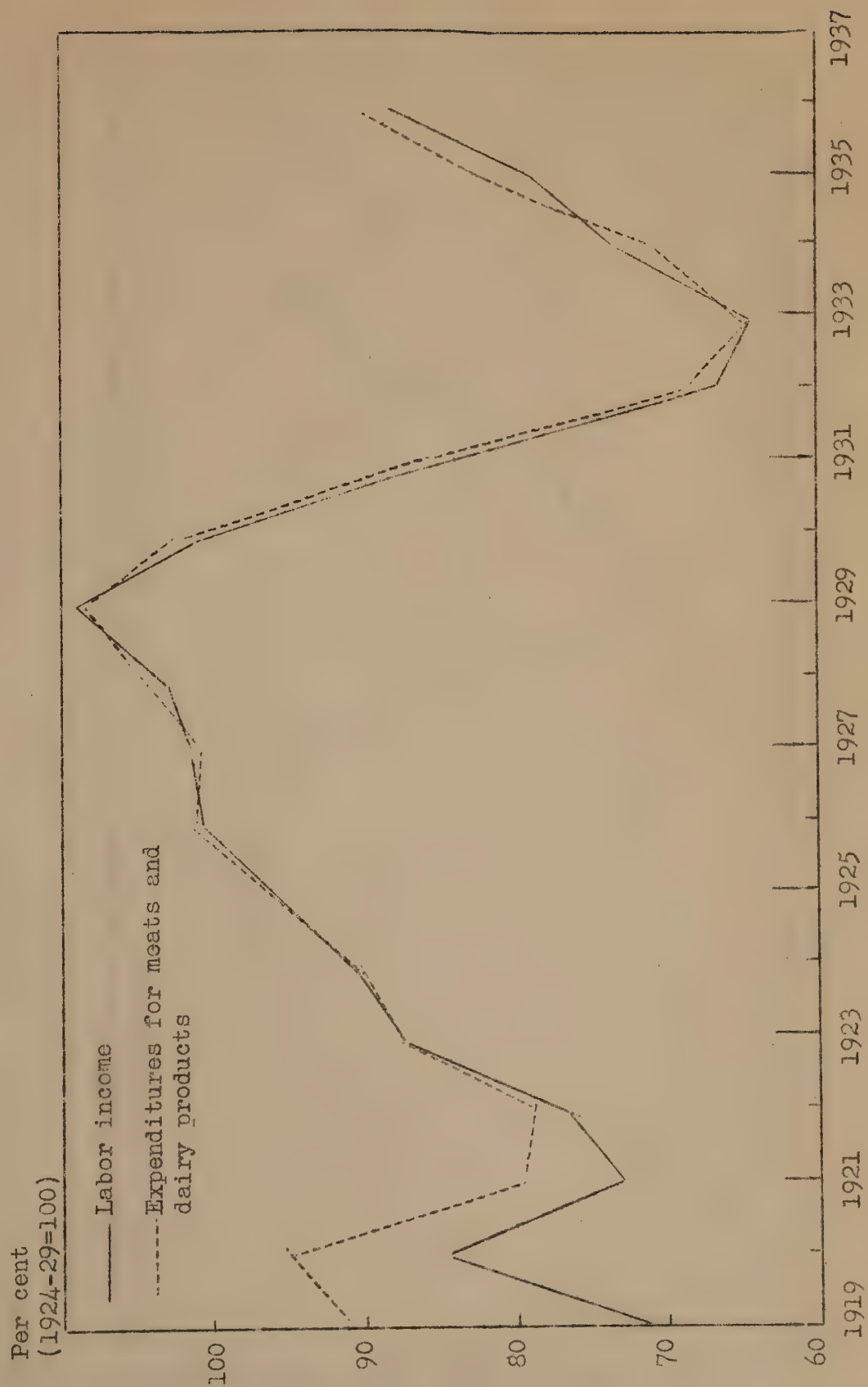






Figure 19

To illustrate the dependence of cash wages paid to hired farm labor on the national income

Expenditures for hired farm labor  
as a percentage of national  
income payments

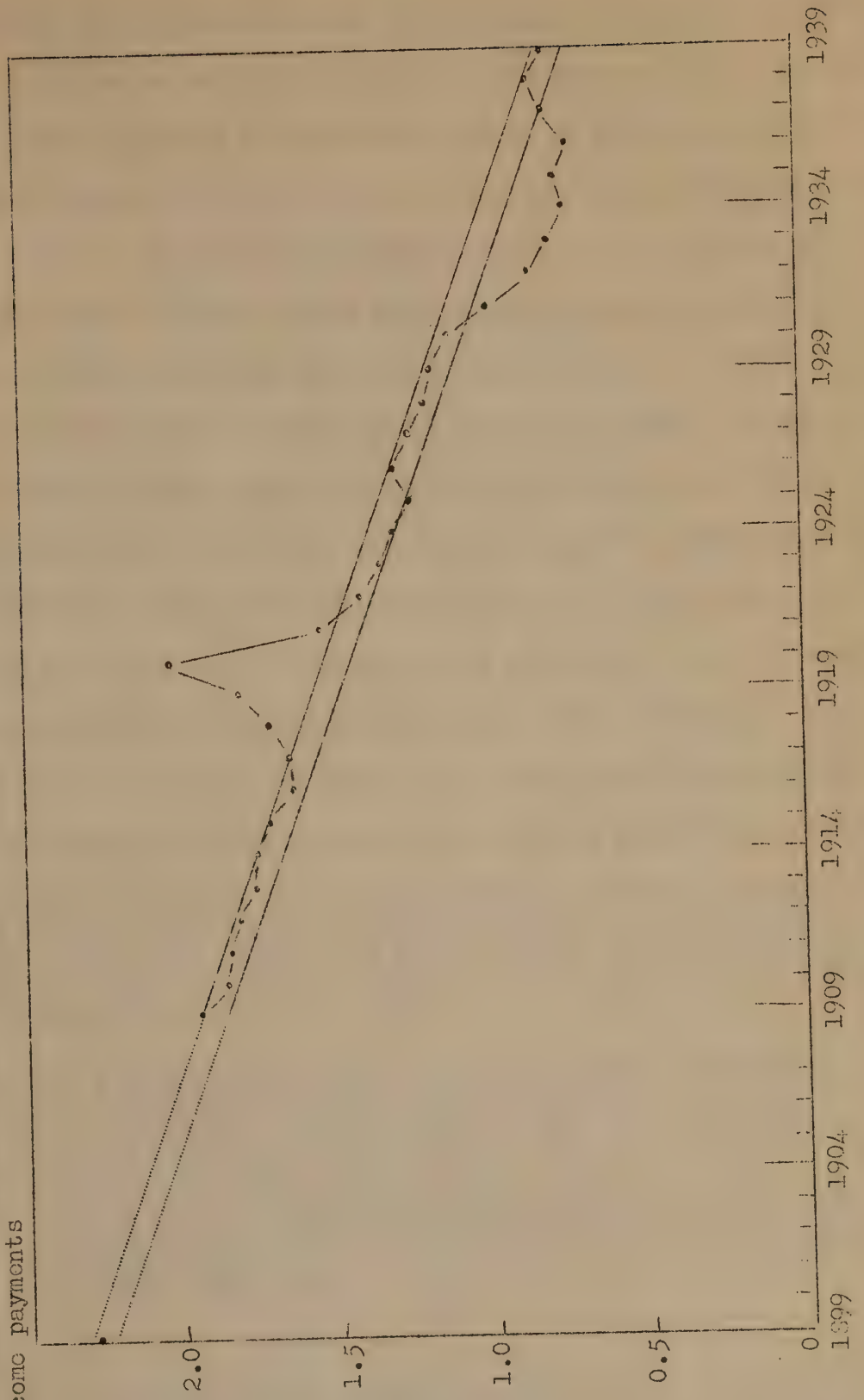






Figure 9

To illustrate the relation of monthly estimates of nonagricultural income to retail expenditures for nonagricultural products as represented by the index of Department Store sales

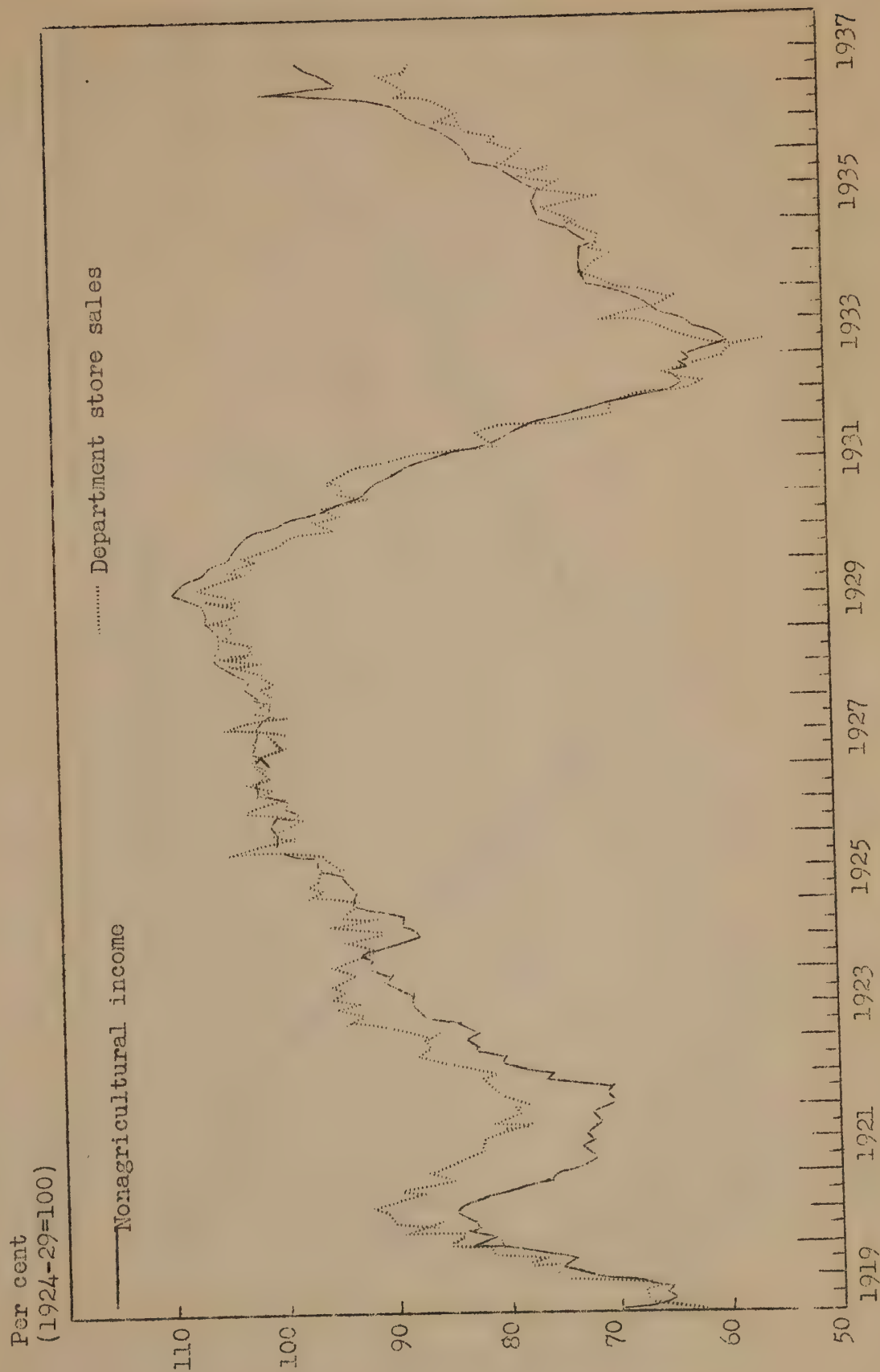
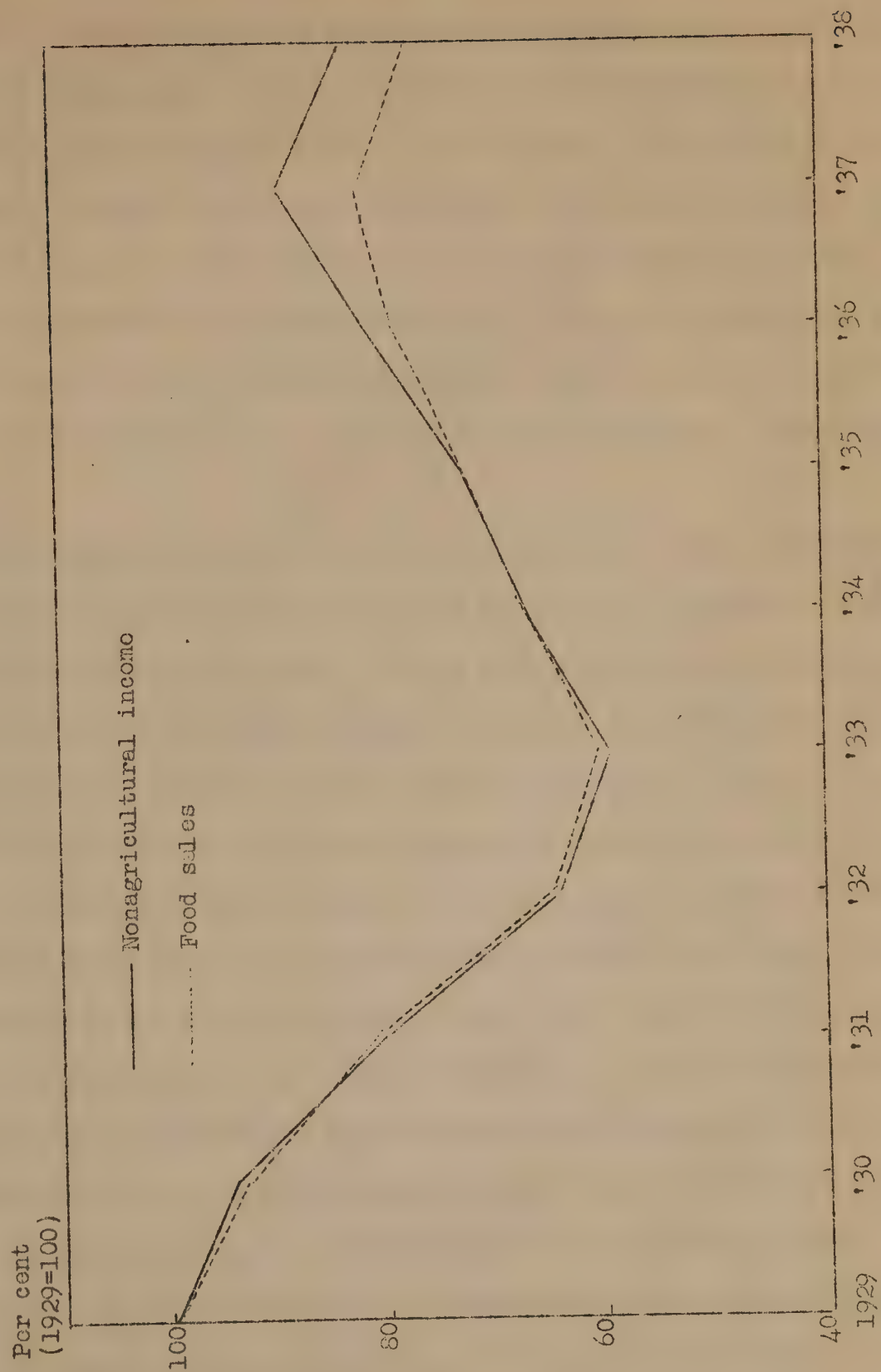




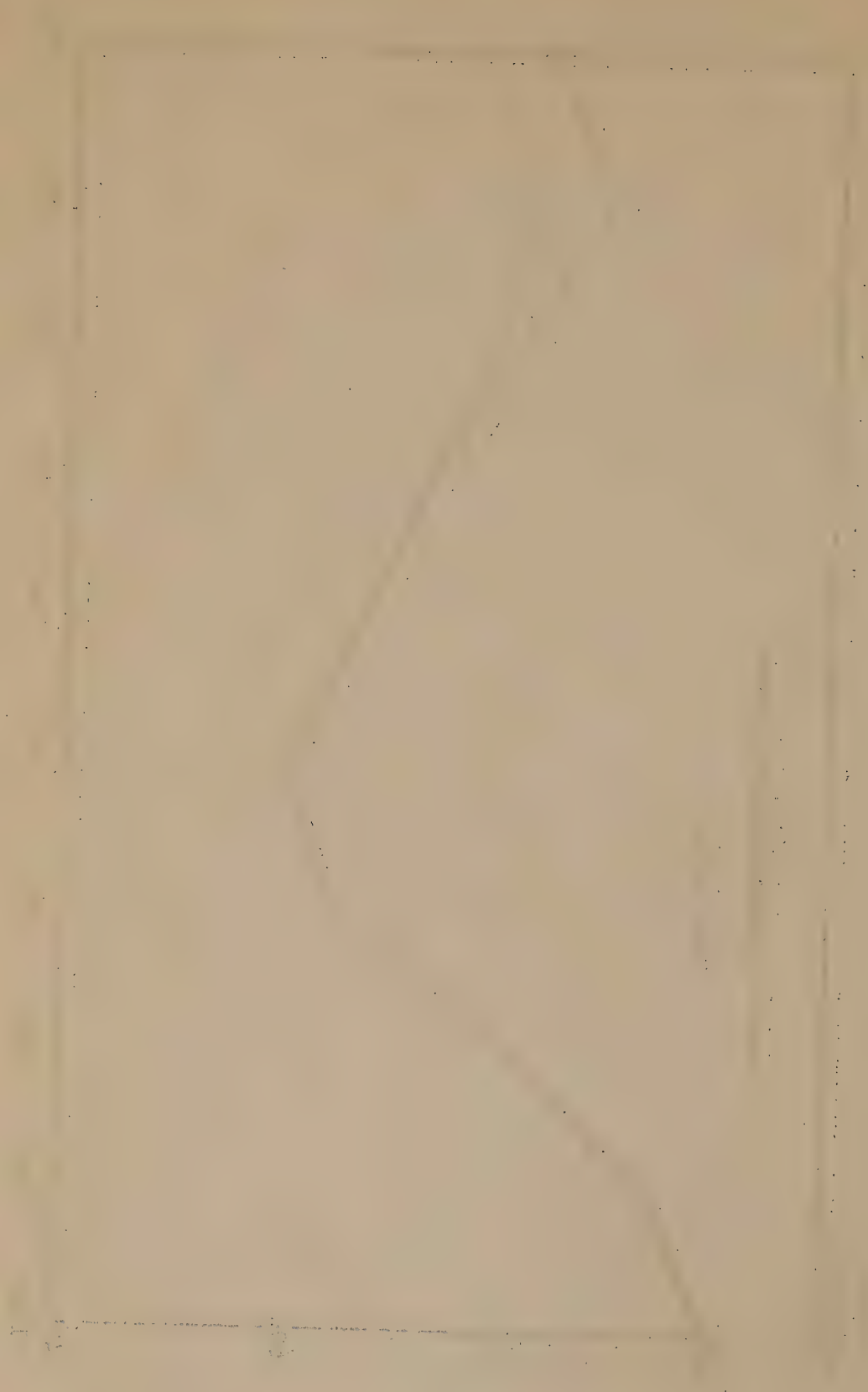


Figure 10

To illustrate the relation of national income (excluding farm income) to retail expenditures for food, 1919-1935, and the apparent shift in that relationship since 1935







(

C.

revealed (as for example in figure 3). They may also be said to be substantiations of the nature of the demand for food products when the nation as a whole is taken as one market. For example, for livestock and livestock products taken individually or in the aggregate, the relatively constant relation between money incomes and retail expenditures indicates unit elasticity of demand -- a fact that we have utilized extensively in the analyses of and prospects for these commodities, since unit elasticity in the national retail market automatically implies certain relationships of volume to retail, wholesale, and farm prices, and to producers' gross and net returns.

The relation of this national characteristic of unit elasticity to the kind of elasticity that may be found in individual consumer's budgets has as yet not been developed. Little also has as yet been done in studying the question of secular changes in patterns of food consumption and in elasticity of demand. In this connection, however, it may be observed that in the case of one group of products, namely hog products, for which retail values have been computed all the way back to 1910, the underlying relation which we showed to have prevailed in the 1920's seems, in fact, to have held for the entire period since 1910. This is shown in figure 11. In addition to the outstanding dependence of retail expenditures for hog products on the national income, there are discrepancies which suggest the possibility of a slightly changing relationship. This relationship would be characterized by a downward shift in the national demand schedule during the 1920's and 1930's as compared with the previous years. It is not yet possible to say whether this is a basic secular change or whether it can be accounted for by revised measures of the national income or revised estimates of retail prices and consumption.

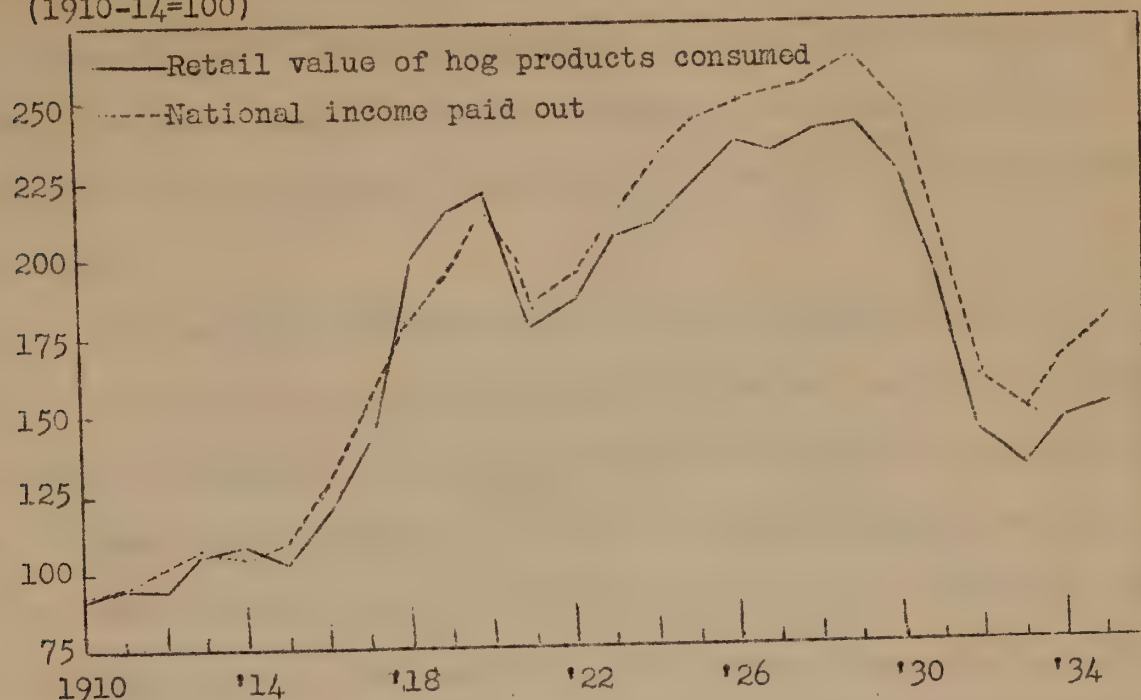




Figure 11

To illustrate the use of national income as a measure of the changing level of demand for hog products

Per cent  
(1910-14=100)



Changes in the aggregate retail value of hog products consumed in the United States have been closely associated with changes in the total income of consumers (national income) during the last 25 years. With a given level of income of consumers, the total retail value of a small quantity of hog products consumed tends to be about the same as that of a large quantity.

The study "Nonagricultural Income as a Measure of Domestic Demand" also develops the fact that it is necessary to differentiate between the different measures of domestic demand depending upon the particular agricultural commodity dealt with. In the case of cotton, for example, it is shown that the variations in demand are best represented by the general index of industrial activity, whereas in the case of livestock and livestock products changes in demand are best represented by an index of the money income of consumers. Cotton is very largely an industrial product. Furthermore, until recently more than half of the market for American cotton was outside the United States. In the case of livestock and livestock products the domestic market constitutes the major outlet.



While limited indexes of purchasing power such as factory payrolls or payrolls in factories, railroads, and mining are still used, most of the commodity and other analyses now carried on in the Department of Agriculture use more general measures of demand. These are either the current measures of the national income or of the national income exclusive of farm income.

The importance of national income as a demand factor in agricultural price and income research has made it necessary to give a good deal of attention to methods of projecting current estimates of the national income. We have already mentioned the use of current estimates of gross income of corporations as one device for bringing official estimates of national income to date. More recently, other devices have been used. One method consisted of translating forecasts of industrial production into comparable estimates of national income. Here we utilized the basic fact that a general index of volume such as the official index of industrial production and a general index of prices such as the Bureau of Labor Statistics living costs when treated as two independent factors in the national income reproduce fairly closely the annual variations in the national income; therefore, if forecasts of industrial activity are available and the course of prices in general assumed, this correlation can be used to forecast the national income. This we have actually done for several years. The May 1939 issue of The Agricultural Situation contains an article entitled "Eighty Billion Dollars--When?" which shows the results of this analysis. See figures 12, 13, and 14.

Another approach to forecasting the national income was made in 1939 when the Federal Reserve Board prepared estimates of expenditures for new durable goods. This series bore a very close statistical resemblance



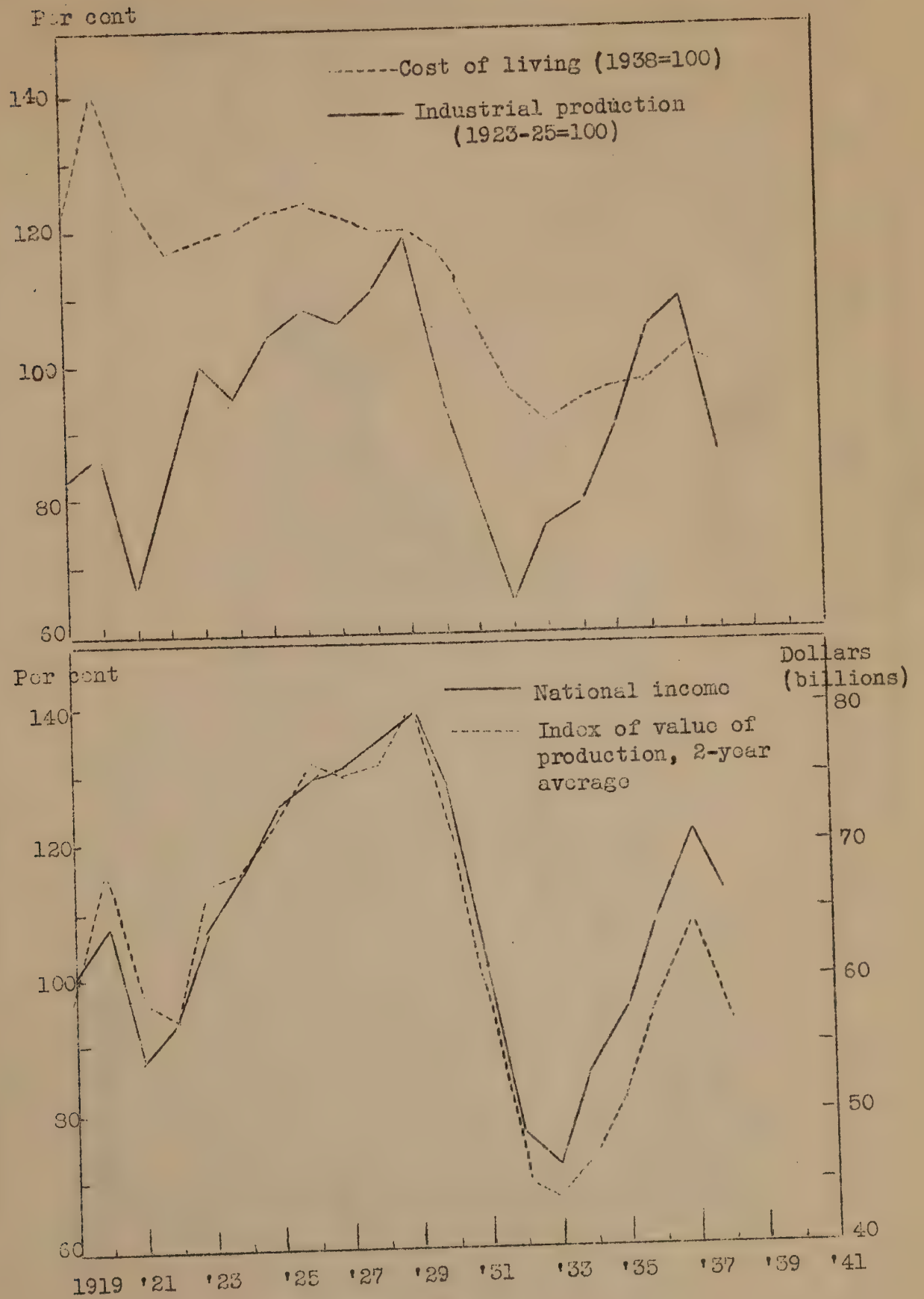
The of national income in a country is a  
and income research has made it necessary to give a good  
the methods of producing current estimates of the national in-  
come. It has already mentioned the use of current estimates on gross in-  
come of corporations as the basis for preparing official estimates of na-  
tional income.

Some other estimates of national income. Here we mention the basic fact  
method of estimating national income. It is the sum of the value of the  
goods and services produced in a country during a given period of time.  
This is the same as the sum of the value of the goods and services  
produced in a country during a given period of time. This is the same  
as the sum of the value of the goods and services produced in a country  
during a given period of time. This is the same as the sum of the value  
of the goods and services produced in a country during a given period of  
time.

ating and national income was made in  
the estimation of expenditures for

Figure 12

To illustrate the use of indexes of industrial production and prices in estimating the national income



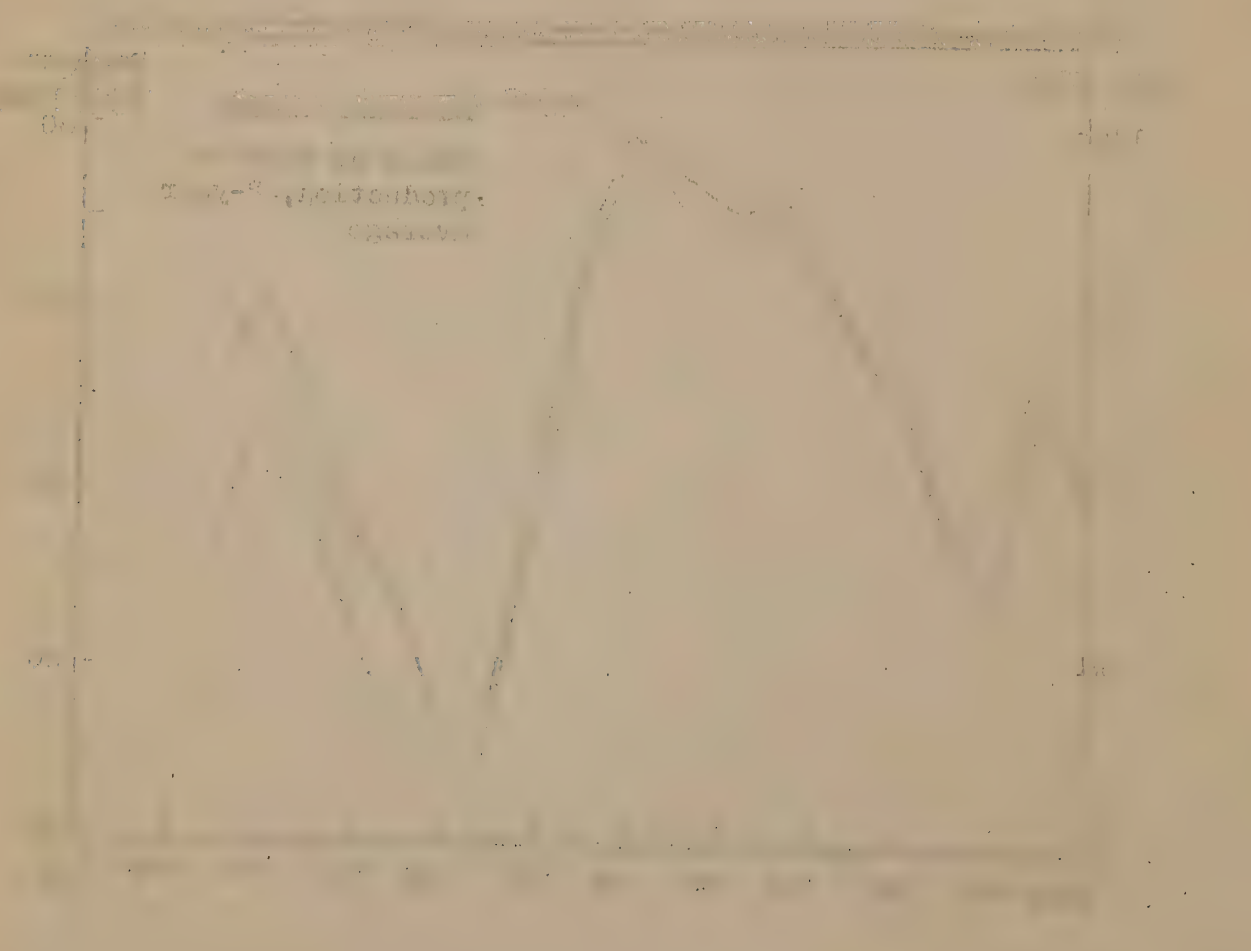
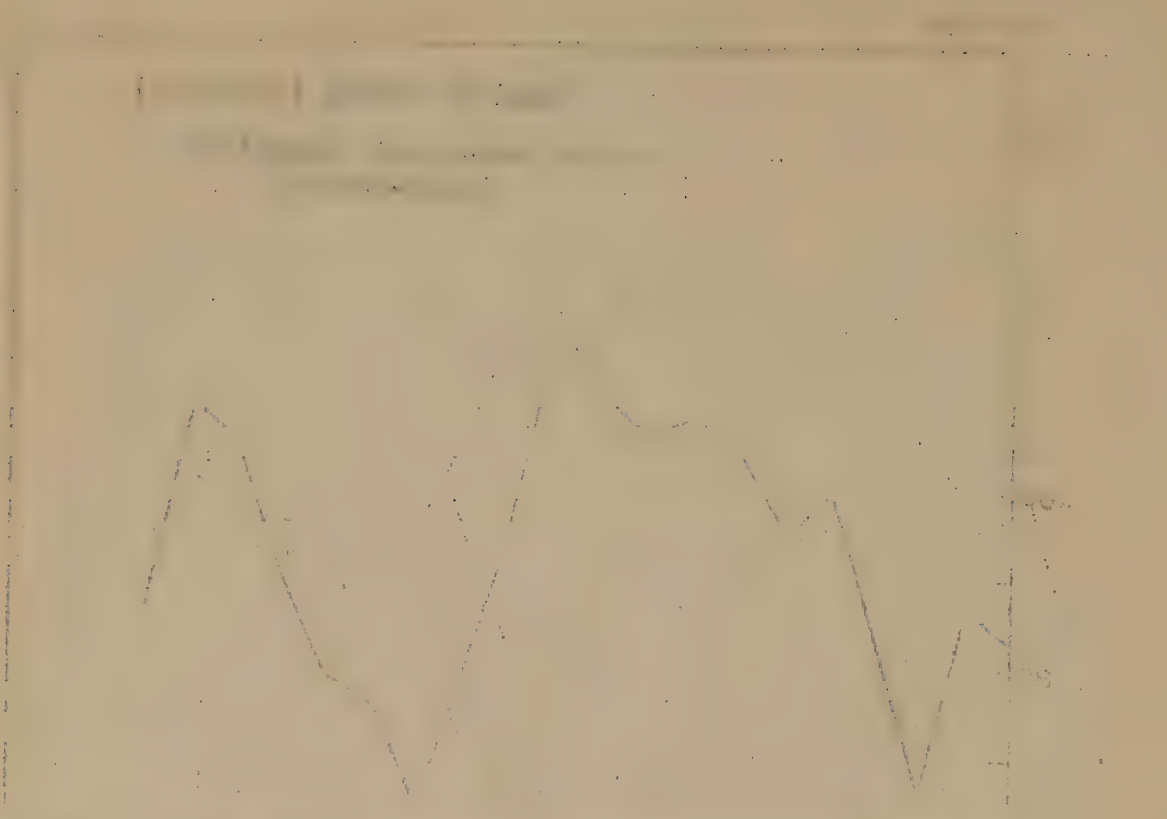




Figure 13

To illustrate the use of indexes of industrial production and prices in estimating the national income

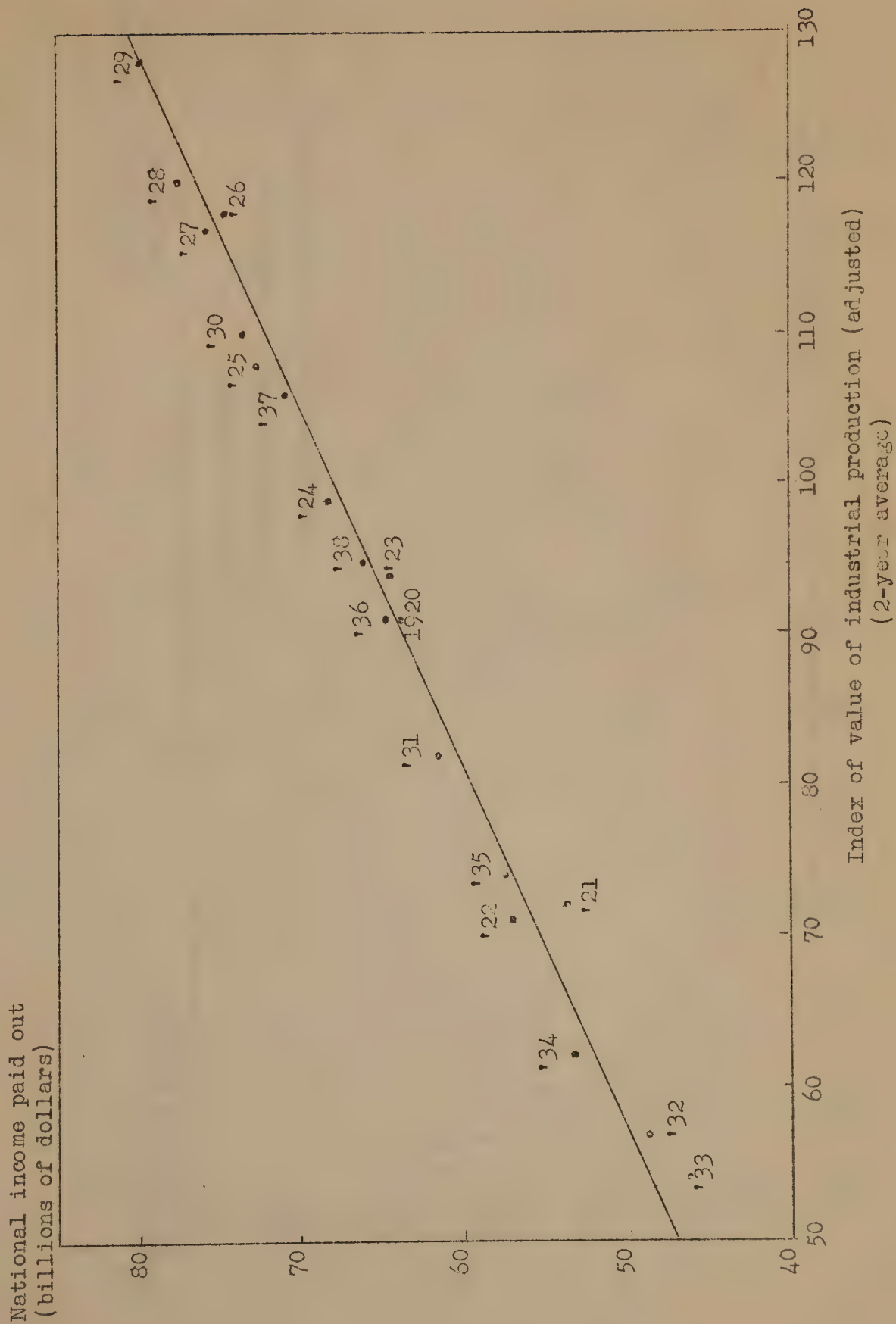
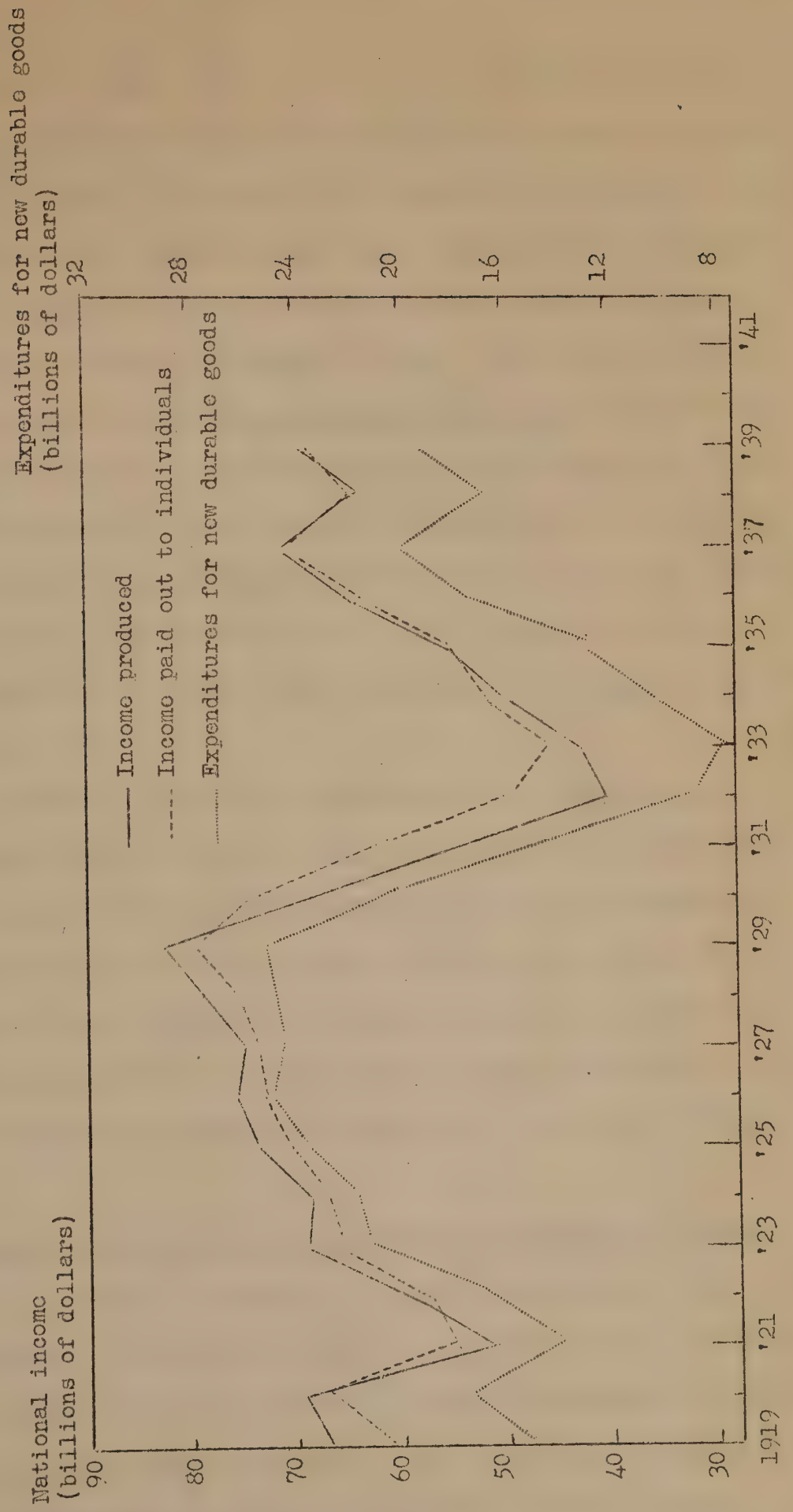




Figure 14

To illustrate the use of estimates of expenditures for new durable goods in estimating the national income







to the annual national income series, as of course it should. It consists of expenditures by producers which result from previous earnings and affect the current flow of income. It consists of expenditures by consumers which result from current flow of income payments and industrial and other activity and affect subsequent activity. These lags and leads are all represented in the annual estimates of national income. (For further comments, see the September 1939 issue of The Agricultural Situation, entitled "The Anatomy of Domestic Demand".) The relationship in recent years has been such that a variation of 1 billion dollars in expenditures for new durable goods has been accompanied by a variation of about 2 to 2.5 billion dollars in the national income. On the basis of this relationship, it has been possible to estimate the national income from estimates of expenditures for new durable goods.

This approach is particularly serviceable in periods like the present when expenditures for durable goods can be estimated independently of industrial production and the national income and when huge Government expenditures make outlays for durable goods the prime mover in the business cycle. When durable goods expenditures cannot be treated as largely independent of industrial production and the national income, their basic relation to both of these items serves as a useful check in business forecasting.

## 2. Uses of national income estimates in formulating agricultural policy

During the 1920's, estimates of national income served only indirectly in the making of agricultural policy. One of the major agricultural policies of that decade was to furnish farmers with information and outlook reports as to supply and demand conditions. It was expected that the information and recommendations resulting from price and demand research

very low level of development. (For further details, see the report of the National Bureau of Economic Research, 1954.)

possible to include the national income from sources of expenditure for

of the total population. (The national income and the total expenditure of the country are the same.) The total expenditure of the country is the sum of the total expenditure of the government and the total expenditure of the private sector. The total expenditure of the government is the sum of the total expenditure of the central government and the total expenditure of the local government. The total expenditure of the private sector is the sum of the total expenditure of the private sector and the total expenditure of the public sector.

national policy. The total expenditure of the private sector is the sum of the total expenditure of the private sector and the total expenditure of the public sector. The total expenditure of the public sector is the sum of the total expenditure of the central government and the total expenditure of the local government.



would cause farmers to make the necessary adjustments and thus benefit agriculture as a whole. The other major policy adopted by the Farm Board, that of stabilizing prices, also rested only remotely, if at all, on specific national income information. But the agricultural programs of the 1930's were much more direct and utilized as objectives some of the price and income standards that grew out of the research work of the 1920's.

One of the central general objectives in agricultural policy in recent years has been to help farmers secure a more nearly "normal" share of the national income. It has been pointed out from time to time, on the basis of the current estimates of national income and its distribution between the farm and nonfarm population, that even on a per capita basis farmers have been receiving less than their proportionate share. For example, in recent years the farmer's share of the national income or agriculture's contribution to the national income has been approximately 10 per cent. This income proportion, normally and in the long run, tends to show a decline parallel to that of the farm proportion in the total or working population, but in the late 1930's the farm income share was only about 80 per cent of the population "share", taking 1910-14 as a base, indicating that the "normal" farm share of the national income should have been perhaps 12 to 13 per cent instead of only 10. See figure 15. This standard evades the age-old fact that the per capita money income of farmers is practically always only 50 to 60 per cent as much as that of the rest of the population. It involves no concept of what is an ethical or equitable share, but merely accepts a long-time relationship, or that of a normal period, as a reasonable objective. The Administration has used this concept to indicate the justification for efforts to secure for farmers income additional to that which they could receive directly from the markets. This additional income was

...the ...  
...the ...  
...the ...  
...the ...

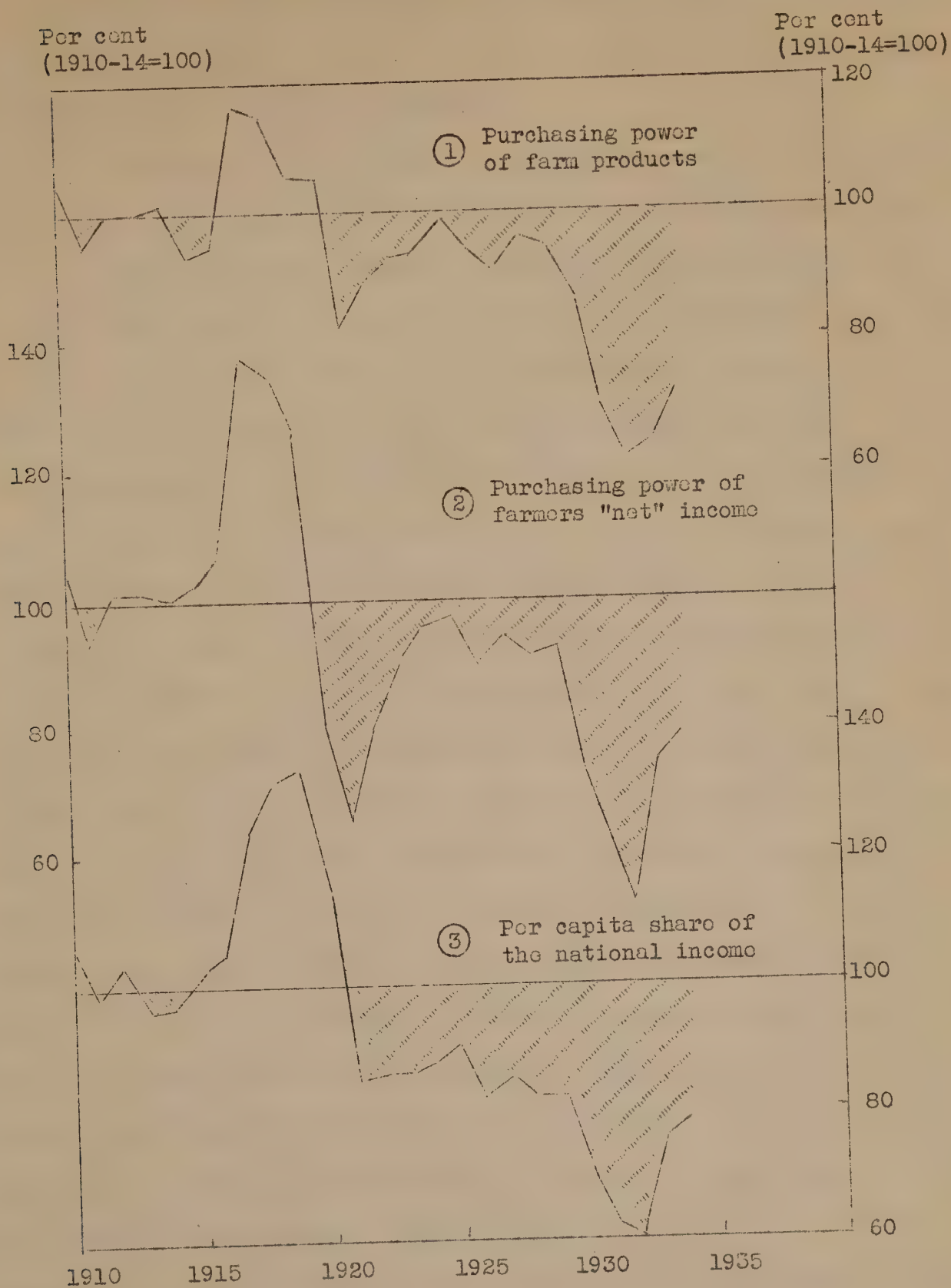
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...

...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...  
...the ...

...the ...  
...the ...

Figure 15

To illustrate the use of national income as one of the standards in the objectives of agricultural adjustment programs





THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 311

LECTURE 1

LECTURE 2

LECTURE 3

LECTURE 4

LECTURE 5

LECTURE 6

LECTURE 7

at first provided through the levying of processing taxes on farm products; more recently it has been provided in the form of disbursement from appropriations derived from general taxation.

Estimates of the national income played a very important role at the time the Agricultural Adjustment Act of 1936 was being revised. as a result of the Supreme Court decision invalidating processing taxes. In setting parity prices as standard in the 1933 farm legislation, income was not dealt with directly. Farm income in years of ample supplies, as in the early 1930's, was primarily a matter of price levels. But in 1934 many farmers experienced crop failures, and the resulting high prices were of benefit only to those who had crops to sell. At that juncture the parity income standard was added to the parity price standard as another and perhaps more fundamental and more desirable objective. It is one of the objectives in current legislation to reestablish at as rapid a rate as practicable the ratio between the purchasing power of the net income per person on farms and that of the income per person not on farms that prevailed during the 5-year period, August 1909-July 1914 inclusive, as determined from statistics available in the U. S. Department of Agriculture. This is the original definition of parity income. It calls for current and prewar estimates of farm income exclusive of production expenses so as to obtain net income of farmers that would make possible a comparison of farm income with the individual incomes of the rest of the population. It calls for much more basic data than are now available. The parity income concept is really a standard of living concept. Present income data fall short in many respects, but one of the great needs is for estimates of farm income received by urban people and of urban income received by farm people.

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...

...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...  
...the ... of ...



To meet the requirements of this policy and the formula describing it, it is necessary to have not only estimates of the national income representing the individual income of all nonfarm people but also a measure of the purchasing power of these two streams of income. At first it was thought that indexes of living costs could be developed for each of the two population groups, but this has not as yet been done. The Bureau of Labor<sup>Statistics</sup> index of living costs represents only the costs of a typical factory worker's budget. The index of living costs for the average farm home as currently published by the Department of Agriculture is not strictly comparable with the limited index of the cost of living as published by the Bureau of Labor Statistics.

In practice, therefore, parity income for agriculture as a whole has been measured by the course of the national income, exclusive of farm income, on a per capita basis. This is one of the very real gaps in statistical data on income, and while a fairly extensive research project on parity income has been under way in the Bureau of Agricultural Economics, there is still much to be done. In recent years per capita income available to the nonfarm population for living purposes as distinguished from business purposes has been approximately (160 per cent) of the prewar average, whereas income from farm production,<sup>exclusive of production expenses (and</sup> exclusive also of income from sources other than farm, for which adequate data are not available), has been about 125 per cent. The ratio of per capita farm income to per capita nonfarm income has thus been approximately 80 per cent of the prewar ratio and represents a deficit in farm income in contrast with the parity standard of 1.5 billion dollars or more. On the basis of this disparity, Congress has appropriated 500 million dollars annually since 1936 for agricultural adjustment and soil conservation payments, and additional payments



for other purposes amounting in total in 1940 to over 700 million dollars.

The parity income standard based on the national income, exclusive of the agricultural contribution, is useful chiefly as an overall standard. It is not usable on a commodity or regional basis. The original definition was drawn up with the knowledge that it could be used only in a global sense, in indicating whether or not a disparity existed between the flow of income to farmers and income to the rest of the population, and what the magnitude of that disparity might be. On the basis of these facts, Congress could appropriate funds to be utilized in various ways either on a commodity basis or some other basis that would tend to restore the prewar per capita ratio of farm to nonfarm income. For the distribution of the total amount appropriated for agricultural adjustment and soil conservation purposes, other standards have been developed in terms of soil-depleting and soil-building practices and in terms of indexes of productivity. Congress has also in recent years provided for price adjustment payments in view of the fact that the 500 million dollar appropriation for agricultural adjustment and soil conservation was not adequate to restore parity prices or parity income. This additional fund has been apportioned among 5 so-called basic commodities according to the amounts by which the current value of normal production fell short of the parity value of normal consumption, the latter being taken as the equivalent of parity income for a commodity.

For a fuller development of these uses of the national income, the reader is referred to two articles which appeared in The Agricultural Situation. One, entitled "Increasing the Farmer's Share of the National Income" in the February 1935 issue, develops the comparison between the three standards referred to here, namely, parity prices, parity income, and the per capita share of the national income. See figure 15. The concluding





four paragraphs of that statement were:

The indexes of the purchasing power of farm products and of the farmers' net income, as well as of the farmers' per capita share of the national income, each reveal the failure of agriculture to recover from the 1921 depression, before it was overwhelmed by the depression after 1929. The exchange value of a unit of farm products on the whole varied less from 1910 to 1929 than did the other two indexes; it rose only about half as high as did the purchasing power of "net" income or the per capita share. It did not show the sharp decline in 1920 that appears in the other two indexes. In 1921 it reached 18 percent below the prewar level, while the purchasing power of net farm income reached 35 percent below.

During the period 1923-29, the relative purchasing power of farm products averaged about 95 percent of prewar, the purchasing power of net income about 93 percent, and the per capita share about 86 percent. As in 1920, the last two indexes also showed pronounced declines in 1930, compared with only a moderate decline in the index of purchasing power of farm products. By 1933, two of the measures averaged only 60 percent of prewar, while the index of purchasing power of net income averaged 52 percent. By 1934, each showed advances to somewhat under 80 percent of the prewar level.

On the mechanistic basis of action and reaction, the farm prosperity of the years 1915-19 was about offset by the subnormal conditions during the postwar years 1920-27. The subnormal conditions that have prevailed since 1927, and in intensified form since 1930, call for a period of several years of agricultural prosperity well above the prewar levels.

To attain such conditions farmers must look forward to (1) balancing their production as between the several branches of agriculture so as to undo the damage done by the 1934 drought; (2) an increase in industrial production as a basis for increased city purchasing power and a larger exchange value of farm products for industrial products, the latter to be brought about either by a rising level of farm prices, or a declining level of industrial prices or a combination of the two; (3) reopening our foreign markets for wheat, cotton, and pork, and increasing foreign purchasing power for the other farm products we export; (4) lowering those costs of distribution which now take an inordinate share of the spread between farm and city retail prices.

The second article, entitled "Parity Income from Farm Production", which appeared in the May 1937 issue indicates how the then available measures of the national income were used to show the magnitude of the discrepancy between per capita income for family living, for the farm and the nonfarm populations, the latter being taken as the income parity standard. After pointing out that in 1936 nonfarm income per capita averaged 145 per cent of the 1910-14 base, and per capita income from farm production 119 per cent, we concluded:



At this point the definition of parity income would call for converting these estimates of relative income into their respective purchasing power when exchanged for the goods and services that farmers and nonfarmers usually purchase; but adequate and comparable living costs are not available. The Department of Agriculture index of prices paid by farmers for commodities, which averaged 125 percent of the prewar level of 1936, does not include certain important items of living costs, such as rent and education, and is subject to other technical qualifications. Similarly, the Bureau of Labor index of cost of living which in 1936 averaged 143 percent of the prewar level does not include expenditures for automobiles, and represents living costs of industrial workers, not of the total nonfarm population. While in the previous article these two indexes were used as measures respectively of farm and nonfarm living costs, it is now generally believed that the differences between them, amounting to a spread of 15 percent in 1936, do not represent the actual differences between the relative living costs for the total farm and the total nonfarm population. This view is partly supported by the fact that the cost of living indexes of the Bureau of Labor Statistics for cities contiguous to farm areas are relatively as high as the index for other cities and therefore about 15 percent higher than the index of prices paid by farmers for commodities. If changes since the prewar period in farm and city living costs may thus be assumed for the present to be approximately equal, then farm income from production per capita available for living in 1936 was 82 percent of prewar parity, and including benefit payments 89 percent. In dollar terms, the 82 percent in 1936 represented a "disparity" of about \$1,170,000,000, of which \$480,000,000 was made up by benefit payments.

### 3. Uses of national income estimates in studies of agricultural welfare

Estimates of national income have been used in a number of other connections, particularly to aid in the developing of agricultural policies or of industrial policies that have a bearing on agricultural welfare.

Long before the recent discussions of inflexible prices and managed prices, agriculturalists pointed to the basic difference between the behavior of agricultural and nonagricultural prices. To emphasize the difference between the relation of production to price in these two economic areas, we undertook early in the 1930's to analyze the prices of certain industrial products. We found that estimates of national income could be used as measures of variations in the demand for nonagricultural products in much the same way as was being done in the case of agricultural products. As one example, we analyzed the wholesale and retail price of automobiles







in terms of total production and variations in the national income. The procedure we used was exactly the same as we had used in the case of retail prices of pork, where total supply and national income were the two price factors. On the basis of this analysis, it was possible for the then Secretary of Agriculture, Henry A. Wallace, before the December 1934 session of the American Statistical Association to point to the basic difference between agricultural and industrial prices as follows:

..... For industrial products, unlike agricultural products, gross returns tend to be greater for larger volumes than for restricted volumes.

We may refer to the automobile industry for an example. Wholesale prices in 1934 were about 17 percent or \$110 below those of 1929; volume produced for sale in the domestic market was 50 percent below. Analyzing the supply and demand factors for the commodity as we do for cotton or hogs, in order to see clearly the relation of volume to price, it appears that the demand for automobiles, as measured by the decline in national income, theoretically lowered the level of automobile prices by about \$255. The effect of reducing volume by 50 percent, however, was to support the price level by about \$145, thus producing a net actual decline of only \$110.

This is a quantitative illustration of how industrial prices tend to remain relatively stable during a period of drastic decline in demand. In consequence, our economic structure is half of putty, half of steel. Nothing so constructed can have any permanence. Either the putty-like prices have to be raised and made rigid, or the steel-like prices have to be lowered and made flexible. Producers whose prices are flexible cannot keep on exchanging goods with producers whose prices stay rigid; workers whose wages are flexible cannot continue to buy goods whose prices are rigid. I hope to see the day when business leaders, in conference assembled, will recognize and grapple with problems as fundamental as this.

Returning to our automobile illustration: Besides this decline of \$110 in wholesale price, although a changing demand indicated a reduction of \$225 in price, there is the question of gross return to consider. The 2,300,000 cars that were sold in 1934 at a wholesale price of \$525 had a total gross value of 1.2 billion dollars. Had wholesale prices been reduced to about \$400, however, 4,000,000 cars might have been sold at a total gross value of 1.6 billion dollars. This means about \$400,000,000 or 33 percent more for a larger volume than a smaller one.

I realize that the power to do this does not rest with the automobile industry alone. The producers of raw materials, the carriers, and the wage-earners, may be concerned. According to the 1933 census, approximately 80 percent of the total product value of the motor industry went for materials, wages, and salaries, materials comprising about 70 percent of the total value. A reduction in price of \$100 per unit could not come out

Henry A. Wallace, before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

and Rural Affairs, in testimony before the Senate Committee on Agriculture

of the 20 percent margin. Doubling the volume, however, would reduce the per-unit margin above materials, wages, and salaries by 50 percent. On a \$525 unit, this would amount to about \$50. The rest of the reduction would have to come out of materials, transportation charges, financing charges, etc. In my opinion this reduction might perhaps be obtained, for it is reasonable to assume that raw material manufacturers should be willing to scale down their prices by at least 10 to 15 percent if the automobile industry could place orders with them for twice their present purchases. With materials in a \$525 unit costing about \$365, this sort of reduction would amount to between \$35 and \$55.

National income estimates have also been used in connection with discussions of foreign trade policy and the farmer's interest in those policies. The basic relationships that we developed in this connection were between the value of industrial production or national income produced and the value of imports. The relation between these two has been remarkably constant. Before the first World War, imports represented 7 per cent of the value of industrial production, and in the 1920's about 6.5 per cent. During the 1930's this ratio fell to about 4.5 per cent.

This basic relationship between the national income (produced) and imports has been utilized in two connections. Shortly after the record drought of 1934 cut our feed crops in two, imports of feed and other farm products increased and caused much confusion in the then current discussions of the effect of the reciprocal trade agreements and of the AAA programs. At that juncture it was possible to use the relation of the value of industrial products and imports as a basis for determining the extent to which imports were affected by the drought and by the general rise in industrial activity which normally brings an expansion in imports for direct consumption or for processing. See figures 16 and 17. In discussing these relationships in an article entitled "Recovery and Import of Farm Products" (The Agricultural Situation, July 1936), we concluded that "about 87 percent of the 1935 agricultural imports were brought into the country as a result



Chinese have been very active in connection with

policy and this has been a factor in their

to relationships that we have seen in this connection

to be that they have been a national factor in the

of interest. The relation between the two has been very

between the two, but it is not a simple one, and it is

of international relations, and it is a factor in the

which the 1950's have been a factor in the

The basic relationship between the two is a factor in the

of fact and our two groups in two, because of their and other

of the two groups

of the effect of the two groups in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the

of the fact that it is a factor in the two groups in the



Figure 16

To illustrate the use of national income produced in analyzing the effect of the 1934 drought on agricultural imports

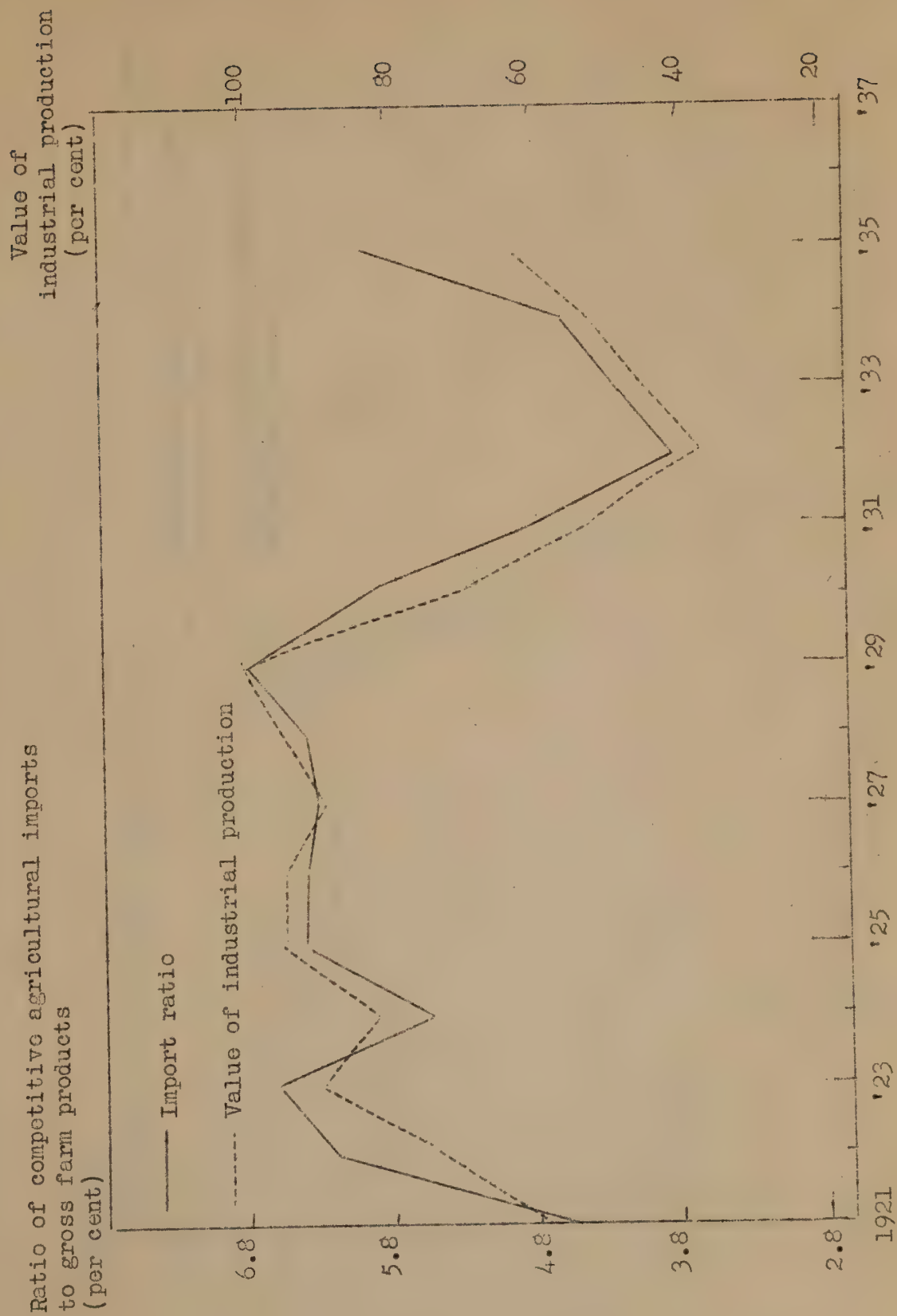
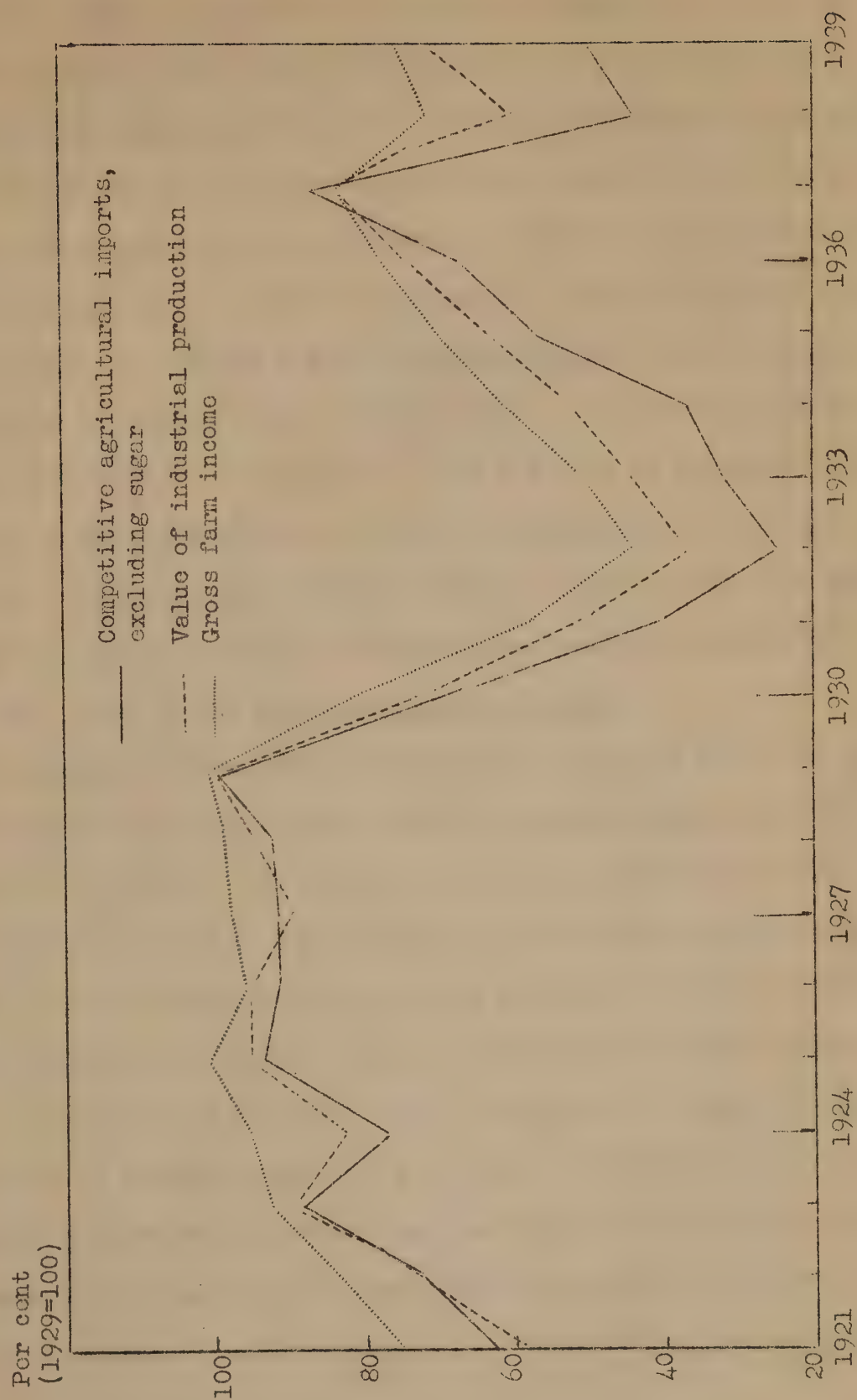




Figure 17

To illustrate the use of national income produced in analyzing the effect of the droughts of 1934 and 1936 on the 1935 and 1937 agricultural imports





11

of the general state of and improvement in domestic industrial and agricultural condition. About 80 percent of the increase between 1934 and 1935 was due to the recovery factor and the balance to the drought of 1934-35."

On another occasion, we utilized this fact of relative constancy in the ratio of imports to the national income as a basis for (a) emphasizing the point that exports may be considered as resting on the purchasing power created through imports, and (b) estimating quantitatively the volume of purchasing power for general and for agricultural exports that industrial activity in the United States created abroad in the form of dollar exchange made available through imports. From the fact of changing trend in this ratio, it was possible also to infer the magnitude of the shift in the dependence of the American economy on imports. These facts were developed in an article entitled "Export Prospects for Southern Farm Products" in the July 1939 issue of the Southern Economic Journal.

The farmer's interest in transportation costs has led us to study the factors influencing freight rates, and the national income has been used as one of the factors. The results of this application have been used by former Secretary Wallace in his testimony before the Interstate Commerce Commission in January 1938 in connection with a request by the railroads for a general increase in rates. The basic relationship between freight revenue and national income which was used to support an argument against a general increase in freight rates at a time when the national income was being hampered by price maladjustments and the need for removing obstructions to commerce is illustrated by the following quotation taken from that testimony, as it appeared in the February 1938 issue of The Agricultural Situation.

... in the ... of the ...  
... the ... of the ...  
... the ... of the ...  
... the ... of the ...

... of the ...  
... the ... of the ...  
... the ... of the ...

... the ... of the ...  
... the ... of the ...  
... the ... of the ...

... the ... of the ...  
... the ... of the ...  
... the ... of the ...

... the ... of the ...  
... the ... of the ...  
... the ... of the ...

There is one additional set of broad facts which have a bearing on this problem. It is the relation of total freight and passenger revenue to the total purchasing power of the country. In the case of passenger traffic, I find that in 1921 revenue for passenger traffic amounted to 2.09 percent of the total national income and that year by year that percentage declined continuously as automobile traffic expanded until in 1934 passenger revenue was only 0.66 percent of the national income. For the past 3 years this proportion has remained practically constant at 0.64 percent in 1935, 0.65 percent in 1936, and 0.63 percent in 1937.

These facts suggest that by and large the country now spends a fairly fixed proportion of its purchasing power for passenger traffic if competitive conditions remain unchanged, and that for a given national income, the railroads may expect only a certain total passenger revenue. This means, furthermore, that an increase in passenger rates with the national income unchanged or declining as at present, is likely to be accompanied by a reduction in volume; and while this would not alter materially the amount of revenue, it would lower service requirements and cause unemployment among railroad labor.

This is essentially the same type of economic problem that many farmers face, particularly those who produce foods and food products. Given a fixed national income, there tends to be only a certain amount of consumer retail expenditures for food, and farmers are confronted with the basic fact that if they seek prices out of line with industrial prices they cannot sell a normal volume.

The case of freight traffic is a similar one. In the years 1921, 1922, and 1923 the railroads could bank on about 7 percent of the national income being spent for railroad freight traffic. By 1929 this proportion had declined to 6 percent and by 1932 to about 5 percent. It has since then remained practically at 5 percent.

The dependence of farm income on the national income and the use of the latter as a standard for parity income has led to the use of national income estimates in connection with the growing interest in the condition of farm labor. Farm wages tend to be the resultant of two basic complex sets of economic forces; one represented by farm income from production and the other by nonfarm income. The former represents the farmer's ability to pay farm wages, the latter represents the competitive pull on the farm labor supply and its influence on farm wages. These two broad factors can be shown to have a strikingly high correlation with the variations in farm wage rates from 1909 to 1933, and on the basis of that basic



1. The first thing I noticed when I stepped out of the plane was the fresh air. It felt like I had been in a cocoon for the last few hours.

2. The second thing I noticed was the view. The landscape below was a patchwork of green fields and small villages. It was so peaceful and quiet.

3. The third thing I noticed was the people. They were all smiling and waving at me. It felt like I had been welcomed home.

4. The fourth thing I noticed was the food. It was so delicious and fresh. I had never tasted anything like it before.

5. The fifth thing I noticed was the weather. It was so perfect. Not too hot, not too cold. Just what I needed.

6. The sixth thing I noticed was the time. It was so late in the day. I had been traveling for so long.

7. The seventh thing I noticed was the place. It was so beautiful. I had never seen anything like it before.

8. The eighth thing I noticed was the people. They were all so kind and helpful. I felt like I had found a new home.

9. The ninth thing I noticed was the food. It was so delicious and fresh. I had never tasted anything like it before.

10. The tenth thing I noticed was the weather. It was so perfect. Not too hot, not too cold. Just what I needed.

11. The eleventh thing I noticed was the time. It was so late in the day. I had been traveling for so long.

12. The twelfth thing I noticed was the place. It was so beautiful. I had never seen anything like it before.

13. The thirteenth thing I noticed was the people. They were all so kind and helpful. I felt like I had found a new home.

14. The fourteenth thing I noticed was the food. It was so delicious and fresh. I had never tasted anything like it before.

15. The fifteenth thing I noticed was the weather. It was so perfect. Not too hot, not too cold. Just what I needed.

correspondence it has been possible to say, as we did in the December 1937 issue of The Agricultural Situation, that farm wage rates in recent years have been relatively low. See figures 18 and 19. This ultimate dependence of farm wage rates on the national income was recent, utilized in the testimony before the Senate Committee on Education and Labor. In that portion of the testimony dealing with the relation of national income to cash wages paid to hired farm labor, we summarized this dependence as follows:

Cash farm wages, just as cash farm income, has shown a declining share in the national income. This is due partly to the decline in the number of hired farm laborers but chiefly to the increase in the nonfarm population. In 1910 cash farm wages amounted to 1.85 percent of the total of national income payments to all individuals, and in 1915, to 1.70 percent. The war altered this trend during 1917-20 but it resumed its gradual downward course during the postwar years. By 1929, in line with the long-time decline, cash farm wages to hired labor amounted to only 1.17 percent and by 1939 to .79 percent. By 1941, following this downward trend it would amount to about .75, and if the national income is about 75 billion dollars in that year the aggregate cash expenditures for farm labor would be about \$525,000,000 or about 5 percent less than the amount paid out in 1938 or 1939. If national income should reach 75 to 80 billion dollars in 1941, expenditures for farm labor might be about 5 percent greater than in 1938-39.

These relationships summarize the composite effect of industrial production, urban employment, nonfarm and farm income, industrial and farm wage rates on the money purchasing power of about 2.4 million hired farm workers--money purchasing power derived from farm production and exclusive of the value of perquisites or supplementary income from nonfarm employment. Even with a substantial increase in the national income to 75-80 billion dollars, their purchasing power under present conditions is not likely to be improved sufficiently to yield any real increase in their living standards.

For the most part, estimates of the national income have been used as one of the factors in price analyses which have in turn been the basis for the annual outlook reports of the Department of Agriculture and many of the price and income problems involved in the programs of the AAA and the marketing agreement programs.

The loss of export markets during the 1930's and more recently as a result of the European war has led to an interest in the distribution of



Figure 18

To illustrate the analysis of farm wage rates as a function of per capita income (excluding farm income) and per capita farm income

Per cent  
(1910-14=100)

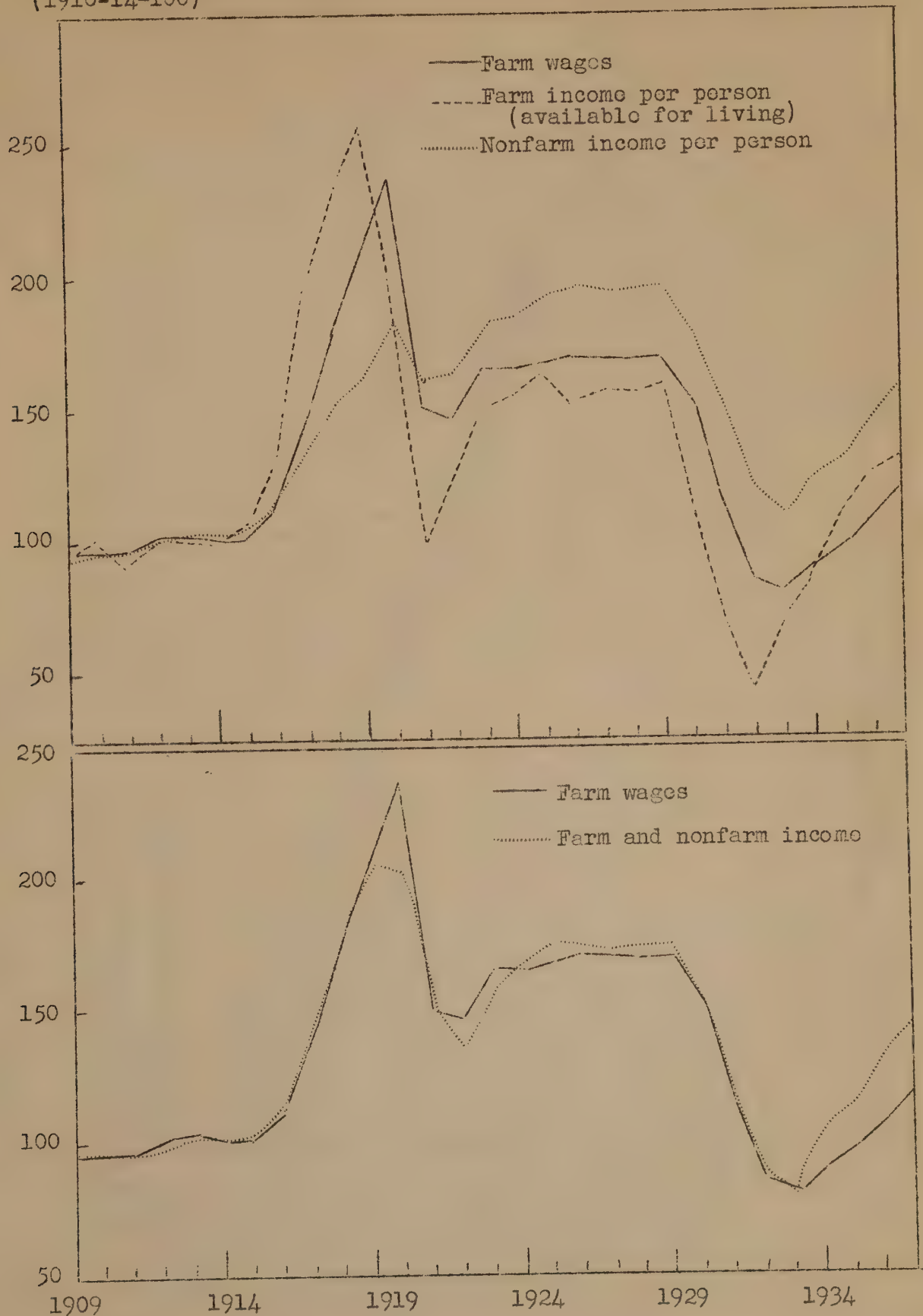


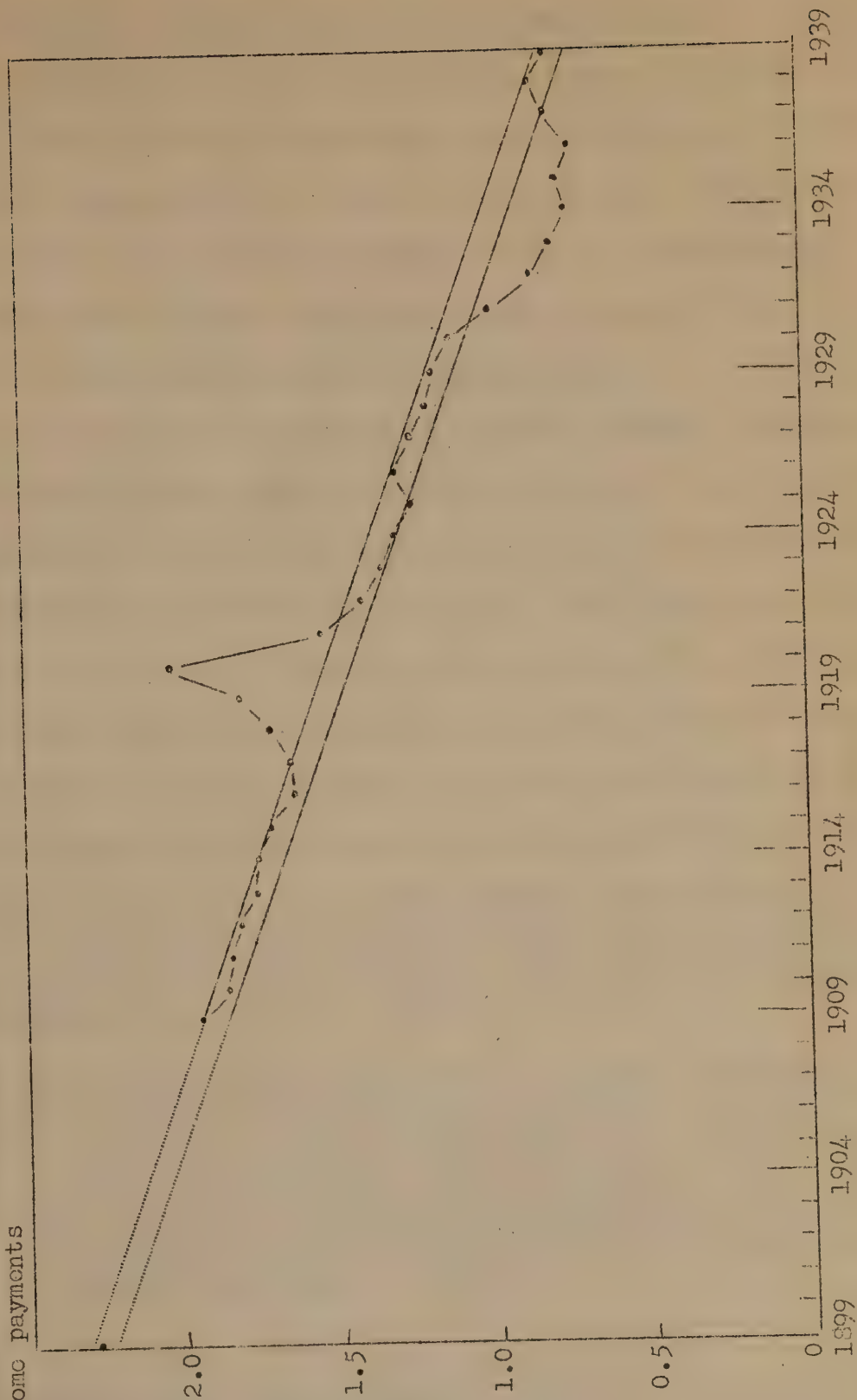




Figure 19

To illustrate the dependence of cash wages paid to hired farm labor on the national income

Expenditures for hired farm labor  
as a percentage of national  
income payments





the national income, as well as to its aggregate value and its annual variations. It has been recognized that an expansion in domestic consumption of farm products as an offset to the loss in exports could come about only through lowering prices to low-income groups or increasing their incomes; in other words, getting for the low-income groups a larger share of the national income. The Consumer Purchases Study of the National Resources Committee has supplied a good deal of the information that has been used in the more recent agricultural policies aiming at increased consumption of agricultural products among low-income groups. These studies indicate that the lower third of farm families receive only 12 per cent of the income available to all farm families and that the lower third of the rural nonfarm and urban families each receive only 11 per cent of income available to them. As one example of the way these facts are being utilized in shaping agricultural policies, we may cite a statement entitled "The Relation of Industry to Agriculture with Special Reference to Defense and the Lower Third" from which the following quotations are taken:

This distribution of income among farm and nonfarm families indicates a potential market for farm products provided the lower third in each group can obtain more income. It may be argued similarly that industrial workers must have an expanded domestic market; they, too, are likely to feel a shrinkage in exports.

The farm population, greatly in need of a higher standard of living, is in effect industry's new frontier for an expanded outlet for industrial goods and services. Farmers generally can serve this purpose, however, only if they too have a larger income. The key to this all-round increase in buying power is increased balanced production in town and country; and since we are not confronted by any lack of farm production, the problem is basically one of more industrial activity and nonfarming occupations for surplus farm labor.

- - -

Looking into this decade, we see the need and the opportunity of dealing more effectively with the problem of the lower third in agriculture. In addition to the activities of the Farm Security Administration, the AAA, and other agencies, there is particular need for extending social





legislation in behalf of agricultural labor, for a rural works program to provide low-income farmers with supplemental employment in soil and forestry conservation work, and for a rural housing program. Direct employment and purchasing power measures of this sort for farm people and the equivalent public works and other programs for low-income people in urban areas are among the ways of converting the social and economic problems of the lower third into the new frontiers beyond the defense program.

The foregoing resumé and illustrations of the uses of national income estimates in agricultural research and policy-making may be concluded by pointing out that within the Department of Agriculture we have witnessed a cycle of development during the past 20 years -- from research to policy to more research and to reshaping of policy. This cycle began with price and income research. It led to the development of broader measures of consumer demand and the use of national income estimates. These were at first only indirectly used in agricultural policy, but later became a direct factor in the form of a standard -- though a general one -- in agricultural adjustment activities. Their use here has emphasized the need for more accurate data and resulted in a great deal of research in farm and national income, in farm and urban population, in farm and urban living costs, and in the distribution of farm and nonfarm income. The course of world affairs and the impact of war in the different segments of agriculture have produced a greater interest in the distribution of income, for this has a direct bearing on (1) how the benefits of a rising national and farm income will be shared by the low and high income farms, (2) what changes in agricultural programs need to be made in view of the altered world and market conditions, (3) how the different urban groups may be affected by rising food costs, and (4) the extent to which malnutrition and underconsumption as revealed by the draft and related to the maldistribution of income may be corrected by governmental action in food distribution, and in improving economic environments and opportunities.





This trend of interest in the distribution of the national income may bring about the need of standards much broader than those used so far. Our present standards are chiefly in terms of money incomes and the material items in consumption patterns. It may eventually be necessary to develop definitions and measures of the non-money items, but practically no progress has been made in this field. Much has been said in the past about the psychic incomes associated with farm and city life. If these are not taken into account, we cannot make satisfactory comparisons between farm and nonfarm per capita incomes. It might therefore be worth while to begin cultivating this field vigorously as we continue perfecting the basic data involved in the current estimates of farm and national income, their distribution and their purchasing power.

It is not improbable that in the next few years we may need three basic standards for agricultural programs. We shall probably continue to need a general national standard based on per capita money or real income of the nonfarm population along the lines of the present. Then, we may also need similar standards for regions or types of farming areas; and if agricultural programs should in time be oriented around the individual farm and farm home, instead of around commodities, we shall need a third standard in the form of money and real income of selected groups of nonfarm families. This suggests the need for pressing the whole field of national income research in all of its details down to detailed information about groups of farm and nonfarm families that may be set up as a basis for contrast and comparison. As we obtain more and more of this detailed information through extended research, it will be possible to adopt policies that do more than merely enable agricultural families to keep pace with the economic progress of nonfarm families. It should then be possible to







adopt policies that narrow the gap between rural and urban living standards -- a gap that in the past we have tended to justify on the assumption that psychic incomes in rural life are greater than psychic incomes in city life.



about policies that narrow the gap between rural and urban living standards -- a gap that in the past we have tended to justify on the assumption that psychic incomes in rural life are greater than psychic incomes in city life.